

CALL NO. 324

CONTRACT ID. 152147

JOHNSON COUNTY

FED/STATE PROJECT NUMBER FD51 058 VARS 1501000

DESCRIPTION RESTORE FLOOD DAMAGED ROADS VARIOUS ROUTES IN JOHNSON COUNTY

WORK TYPE FLOOD REPAIR FOR FEMA

PRIMARY COMPLETION DATE 11/30/2015

#### LETTING DATE: April 24,2015

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME April 24,2015. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

**REQUIRED BID PROPOSAL GUARANTY:** Not less than 5% of the total bid.

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## PART I SCOPE OF WORK

#### **ADMINISTRATIVE DISTRICT - 12**

CONTRACT ID - 152147 FD51 058 VARS 1501000

**COUNTY - JOHNSON** 

PCN - MP058VARS1501 FD51 058 VARS 1501000

RESTORE FLOOD DAMAGED ROADS VARIOUS ROUTES IN JOHNSON COUNTY KY 580, KY 1409, KY 1559, KY 1596, KY 1750, KY 3389, KY 3390, A DISTANCE OF 06.84 MILES.FLOOD REPAIR FOR FEMA GEOGRAPHIC COORDINATES LATITUDE 37:48:30.00 LONGITUDE 82:56:00.00

#### **COMPLETION DATE(S):**

SPECIFIED COMPLETION DATE -

COMPLETED BY 11/30/2015 ALL ITEMS IN CONTRACT

ROAD CLOSURE IN EXCESS OF

0 CALENDAR DAYS PERMITTED PERIODS

#### **CONTRACT NOTES**

#### **PROPOSAL ADDENDA**

All addenda to this proposal must be applied when calculating bid and certified in the bid packet submitted to the Kentucky Department of Highways. Failure to use the correct and most recent addenda may result in the bid being rejected.

#### **BID SUBMITTAL**

Bidder must use the Department's Expedite Bidding Program available on the Internet web site of the Department of Highways, Division of Construction Procurement. (www.transportation.ky.gov/construction-procurement)

The Bidder must download the bid file located on the Bid Express website (www.bidx.com) to prepare a bid packet for submission to the Department. The bidder must submit electronically using Bid Express.

#### JOINT VENTURE BIDDING

Joint venture bidding is permissible. All companies in the joint venture must be prequalified in one of the work types in the Qualifications for Bidders for the project. The bidders must get a vendor ID for the joint venture from the Division of Construction Procurement and register the joint venture as a bidder on the project. Also, the joint venture must obtain a digital ID from Bid Express to submit a bid. A joint bid bond of 5% may be submitted for both companies or each company may submit a separate bond of 5%.

#### UNDERGROUND FACILITY DAMAGE PROTECTION

The contractor is advised that the Underground Facility Damage Protection Act of 1994, became law January 1, 1995. It is the contractor's responsibility to determine the impact of the act regarding this project, and take all steps necessary to be in compliance with the provision of the act.

#### SPECIAL NOTE FOR COMPOSITE OFFSET BLOCKS

Contrary to the Standard Drawings (2012 edition) the Cabinet will allow 6" composite offset blocks in lieu of wooden offset blocks, except as specified on proprietary end treatments and crash cushions. The composite blocks shall be selected from the Cabinet's List of Approved Materials.

## <u>REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN</u> <u>ENTITY</u>

Pursuant to KRS 176.085(1)(b), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by KRS 14A.9-010 to obtain a certificate of authority to transact business in the Commonwealth ("certificate") from the Secretary of State under KRS 14A.9-030 unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. If the foreign entity is not required to obtain a certificate as provided in KRS 14A.9-010, the foreign entity should identify the applicable exception. Foreign entity is defined within KRS 14A.1-070.

For all foreign entities required to obtain a certificate of authority to transact business in the Commonwealth, if a copy of the certificate is not received by the contracting agency within the time frame identified above, the foreign entity's solicitation response shall be deemed non-responsive or the awarded contract shall be cancelled.

Businesses can register with the Secretary of State at https://secure.kentucky.gov/sos/ftbr/welcome.aspx.

#### SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

Questions about projects during the advertisement should be submitted in writing to the Division of Construction Procurement. This may be done by fax (502) 564-7299 or email to <a href="mailto:kytc.projectquestions@ky.gov">kytc.projectquestions@ky.gov</a>. The Department will attempt to answer all submitted questions. The Department reserves the right not to answer if the question is not pertinent or does not aid in clarifying the project intent.

The deadline for posting answers will be 3:00 pm Eastern Daylight Time, the day preceding the Letting. Questions may be submitted until this deadline with the understanding that the later a question is submitted, the less likely an answer will be able to be provided.

The questions and answers will be posted for each Letting under the heading "Questions & Answers" on the Construction Procurement website (<a href="www.transportation.ky.gov/contract">www.transportation.ky.gov/contract</a>). The answers provided shall be considered part of this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

#### HARDWOOD REMOVAL RESTRICTIONS

The US Department of Agriculture has imposed a quarantine in Kentucky and several surrounding states, to prevent the spread of an invasive insect, the emerald ash borer.

Hardwood cut in conjunction with the project may not be removed from the state. Chipping or burning on site is the preferred method of disposal.

#### INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

Identification of excess material sites and borrow sites shall be the responsibility of the Contractor. The Contractor shall be responsible for compliance with all applicable state and federal laws and may wish to consult with the US Fish and Wildlife Service to seek protection under Section 10 of the Endangered Species Act for these activities.

#### **ACCESS TO RECORDS**

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

In the event of a dispute between the contractor and the contracting agency, Attorney General, or the Auditor of Public Accounts over documents that are eligible for production and review, the Finance and Administration Cabinet shall review the dispute and issue a determination, in accordance with Secretary's Order 11-004. (See attachment)

10/29/12



Steven L. Beshear Governor Lori H. Flanery Secretary

Room 383, Capitol Annex 702 Capital Avenue Frankfort, KY 40601-3462 (502) 564-4240 Fax (502) 564-6785

#### **SECRETARY'S ORDER 11-004**

#### FINANCE AND ADMINISTRATION CABINET

#### **Vendor Document Disclosure**

WHEREAS, in order to promote accountability and transparency in governmental operations, the Finance and Administration Cabinet believes that a mechanism should be created which would provide for review and assistance to an Executive Branch agency if said agency cannot obtain access to documents that it deems necessary to conduct a review of the records of a private vendor that holds a contract to provide goods and/or services to the Commonwealth; and

WHEREAS, in order to promote accountability and transparency in governmental operations, the Finance and Administration Cabinet believes that a mechanism should be created which would provide for review and assistance to an Executive Branch agency if said agency cannot obtain access to documents that it deems necessary during the course of an audit, investigation or any other inquiry by an Executive Branch agency that involves the review of documents; and

WHEREAS, KRS 42.014 and KRS 12.270 authorizes the Secretary of the Finance and Administration Cabinet to establish the internal organization and assignment of functions which are not established by statute relating to the Finance and Administration Cabinet; further, KRS Chapter 45A.050 and 45A.230 authorizes the Secretary of the Finance and Administration Cabinet to procure, manage and control all supplies and services that are procured by the Commonwealth and to intervene in controversies among vendors and state agencies; and

**NOW, THEREFORE**, pursuant to the authority vested in me by KRS 42.014, KRS 12.270, KRS 45A.050, and 45A.230, I, Lori H. Flanery, Secretary of the Finance and Administration Cabinet, do hereby order and direct the following:

- I. Upon the request of an Executive Branch agency, the Finance and Administration Cabinet ("FAC") shall formally review any dispute arising where the agency has requested documents from a private vendor that holds a state contract and the vendor has refused access to said documents under a claim that said documents are not directly pertinent or relevant to the agency's inquiry upon which the document request was predicated.
- II. Upon the request of an Executive Branch agency, the FAC shall formally review any situation where the agency has requested documents that the agency deems necessary to



- conduct audits, investigations or any other formal inquiry where a dispute has arisen as to what documents are necessary to conclude the inquiry.
- III. Upon receipt of a request by a state agency pursuant to Sections I & II, the FAC shall consider the request from the Executive Branch agency and the position of the vendor or party opposing the disclosure of the documents, applying any and all relevant law to the facts and circumstances of the matter in controversy. After FAC's review is complete, FAC shall issue a Determination which sets out FAC's position as to what documents and/or records, if any, should be disclosed to the requesting agency. The Determination shall be issued within 30 days of receipt of the request from the agency. This time period may be extended for good cause.
- IV. If the Determination concludes that documents are being wrongfully withheld by the private vendor or other party opposing the disclosure from the state agency, the private vendor shall immediately comply with the FAC's Determination. Should the private vendor or other party refuse to comply with FAC's Determination, then the FAC, in concert with the requesting agency, shall effectuate any and all options that it possesses to obtain the documents in question, including, but not limited to, jointly initiating an action in the appropriate court for relief.
- V. Any provisions of any prior Order that conflicts with the provisions of this Order shall be deemed null and void.

#### SPECIAL NOTE FOR RECIPROCAL PREFERENCE

#### Reciprocal preference to be given by public agencies to resident bidders

By reference, KRS 45A.490 to 45A.494 are incorporated herein and in compliance regarding the bidders residency. Bidders who want to claim resident bidder status should complete the Affidavit for Claiming Resident Bidder Status along with their bid in the Expedite Bidding Program. Submittal of the Affidavit should be done along with the bid in Bid Express.

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#### EXPEDITE PROJECT WORK ORDER

The Contractor may request that the Department expedite the work order for this project to allow for maximization of time to complete the work. In order for the Department to accomplish this task, the Contractor may be required to "hand carry" all required project documentation to facilitate the process. Immediately UPON NOTIFICATION OF AWARD OF THE CONTRACT, deliver required project documentation to:

Division of Construction Procurement

200 Mero St.

Frankfort, KY 40602

#### SURFACING AREAS

The Department has not estimated surfacing and shoulder areas. The Engineer will determine the surfacing and shouldering areas at the time of construction.

#### ASPHALT MIXTURE

Unless otherwise noted, the Department estimates the rate of application for all asphalt mixtures to be 110 lbs/sy per inch of depth.

#### **DGA BASE**

Unless otherwise noted, the Department estimates the rate of application for DGA Base to be 115 lbs/sy per inch of depth.

#### DGA BASE FOR SHOULDERS

Unless otherwise noted, the Department estimates the rate of application for DGA Base for Shoulders to be 115 lbs/sy per inch of depth. The Department will not measure necessary grading and/or shaping of existing shoulders prior to placing of DGA Base, but shall be incidental to the Contract unit price per ton for DGA Base.

Accept payment at the Contract unit price per ton as full compensation for all labor, materials, equipment, and incidentals for grading and/or shaping of existing shoulders and furnishing, placing, and compacting the DGA Base.

#### INCIDENTAL SURFACING

The Department has included in the quantities of asphalt mixtures established in the proposal estimated quantities required for resurfacing or surfacing mailbox turnouts, farm field entrances, residential and commercial entrances, curve widening, ramp gores and tapers, and road and street approaches, as applicable. Pave these areas to the limits as shown on Standard Drawing RPM-110-06 or as directed by the Engineer. In the event signal detectors are present in the intersecting streets or roads, pave the crossroads to the right of way limit or back of the signal detector, whichever is the farthest back of the mainline. Surface or resurface these areas as directed by the Engineer. The Department will not measure placing and compacting for separate payment but shall be incidental to the Contract unit price for the asphalt mixtures.

#### **OPTION B**

Be advised that the Department will control and accept compaction of asphalt mixtures furnished on this project under OPTION B in accordance with Sections 402 and 403.

#### SPECIAL NOTES FOR SLIDE REPAIR FD51 058 VARS 1501000

#### I. DESCRIPTION

Except as specified herein, perform all work in accordance with the Department's Standard and Supplemental Specifications and Standard and Sepia Drawings, current editions. Article references are to the Standard Specifications. Furnish all equipment, labor, materials, and incidentals for the following work:

- (1) Maintain and Control Traffic; (2) Site Preparation; (3) Erosion Control;
- (4) Drilled railroad rail piling with cribbing; (5) Excavation and Backfill;
- (6) Gabion Walls and Channel Lining; (7) Guardrail; (8) Pavement and shoulder restoration; and (9) All other work specified as part of this contract.

#### II. MATERIALS

Provide for materials to be sampled and tested in accordance with the Department's Sampling Manual. Unless otherwise specified herein, make materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing.

- **A. Maintain and Control Traffic.** See Traffic Control Plan.
- **B. Railroad Rails.** Use new or used railroad rail with a nominal weight of 130 pounds per yard or greater. See Typical Identification of Railroad Rail Sizes Classification Stamp. If the manufacturer's classification stamp is unidentifiable, provide certification for nominal weight. Furnish only visibly straight and structurally sound rails with no splices. Obtain the Engineer's approval of the rails prior to use.
- **C. Cribbing.** The Department will furnish used steel beam guardrail for cribbing. The Department will make the cribbing available to the Contractor at the Department's Johnson County Maintenance Facility. Schedule pickup with the Engineer, provide labor and equipment to load the materials on the Contractor's vehicles, and deliver the cribbing materials to the project work sites.
- **D. Backfill.** For backfill around the railroad rails in the drilled sockets, use concrete, free flowing sand, pea gravel, or crushed limestone or crushed sandstone with 100% passing a one-half (½) inch sieve. Do not use auger tailings. The Engineer will use visual inspection and/or material testing as applicable to determine acceptability.

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For interior backfill behind cribbing, use Crushed Limestone Aggregate Size No. 2 or Size No. 23 meeting the requirements of Section 805. Do not use excavated spoil from the existing roadway. The Engineer will use visual inspection and/or material testing as applicable to determine acceptability.

- **E. Geotextile Fabric.** For interior backfill wrap behind cribbing, furnish Type IV Geotextile Fabric.
- **F. Erosion Control.** See Special Note for Erosion Control.
- G. Guardrail. See Special Notes for Guardrail.
- **H. Culvert Pipe.** See Special Notes for Culvert Pipe.
- **I. Retaining Wall Gabion.** Furnish wire baskets conforming to Sections 813.13 and 813.13.02. Furnish crushed limestone coarse aggregate conforming to Section 805.13.06.
- **J. Shoulders.** Use DGA, do not use Crushed Stone Base in lieu of DGA.
- **K. Pavement Restoration.** See Special Notes for Culvert Replacement for restoration of pavement over pipe trench.

#### III. CONSTRUCTION METHODS

- **A. Maintain and Control Traffic.** See Traffic Control Plan.
- **B. Erosion Control.** See Special Note for Erosion Control.
- **C. Site Preparation.** Be responsible for all Site Preparation, including but not limited to, clearing and grubbing, trenching, roadway and special excavation (except for excavation behind cribbed railroad rails for the crushed limestone backfill), structure excavation, embankment and embankment in place, sweeping and/or otherwise removing debris from pavement and shoulders, removal of obstructions or any other items; disposal of materials; and final dressing and restoration. Clear and grub the minimum areas required to perform the other items of work; the Department has not determined the acreage of clearing and grubbing and the bidder must draw his own conclusions. Provide positive drainage of pavement, slopes, and ditches at all times during and upon completion of construction. Perform all site preparation only as approved or directed by the Engineer. Dispose of excess excavation, waste, and debris off the right-of-way at sites obtained by the Contractor at no additional cost to the Department. See Special Note for waste and Borrow.

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**D. Railroad Rails (Drilled).** Consider the extents and depths on the summary break sheets to be approximate only; the Engineer will determine exact locations at the time of construction. If necessary, excavate a trench behind the proposed location of drilled railroad rails as directed by the Engineer to provide a platform for drilling operations. Install railroad rail in drilled sockets in rock or stable material under the landslides (see Figure 1) or the eroded areas (see Figure 2) at the specified locations. Contrary to Figure 3 and Table I, unless directed otherwise by the Engineer drill rail sockets parallel to the centerline of the roadway in a single row spaced 3 feet on centers. The Department will not allow a change in the scope of work or increase in quantities without prior written approval from the District 12 Project and Delivery and Preservation Branch Manager

Drill sockets of not more than 12 inches in diameter to allow free insertion of the railroad rails. Drill sockets to allow installation of the railroad rails such that the pavement and shoulder widths approximate the widths shown on the typical section. If the typical section varies from the adjacent roadway, the Engineer will determine the pavement and shoulder widths to be constructed. Use each drilled socket as a sounding for the rail to be installed in it. Unless directed otherwise by the Engineer, install no less than one-half the free end length as embedment into solid rock (See Fig. 1 and Fig. 2). If solid rock cannot be obtained, the Engineer will determine the length of embedment required in other stable foundation.

If the Engineer directs double or triple rows, stagger the rows as shown on Figure 3 to obtain the required spacing; however do not space rows more than 2 feet apart. Determine rail spacing in each row according to Table I. Obtain the Engineer's approval of the row and line spacing prior to drilling at each site.

After each hole is drilled, immediately install the railroad rail with the flanges positioned perpendicular to the direction of the landslide or break (see Figure 3). Set height of rail to that needed to reestablish pavement and shoulder typical section. Immediately after the railroad rail is installed, backfill the drilled hole. Shovel the material into the hole in small amounts so as to avoid bridging between the rail and the sides of the hole. Do not use auger tailings for backfilling the socket. Cut off any excess rail length flush with the proposed ground line. If possible, use cutoffs elsewhere in the project. Retain possession of unusable cutoffs.

**E. Cribbing.** Expose the railroad rail before backfilling. Install Cribbing to restrain the proposed backfill as shown on Figures 1 and 2. Attach the cribbing by welding to the railroad steel with a minimum of three welded connections per section of guardrail, placed so that the guardrail ends align with and overlap at the installed railroad rail, and are not spliced between installed railroad rails. Extend cribbing 2 feet below existing ground line. If solid rock is encountered, extend cribbing to solid rock line. The Engineer may direct specific methods and procedures as required by site conditions.

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- **F. Backfill.** Backfill the excavated trench behind the installed cribbing with the crushed stone backfill wrapped in Type IV Geotextile Fabric to approximate the existing roadway and shoulder widths as shown on the typical section or as directed by the Engineer. Do not use excavated spoil from the existing roadway as fill material.
- **G. Restoration.** Consider the extents and depths on the summary break sheets to be approximate only; the Engineer will determine exact locations at the time of construction. Use suitable excavated earth and/or borrow material aerated to proper moisture content prior to use for embankment and restoration in areas outside the limits of the drilled railroad rail wall. Obtain approval from the Engineer prior to reuse of the excavated soil.

Excavate for ditches, slopes, and pavement drainage and construct embankments, slopes, and channel lining according to Sections 206 and 703 or as directed by the Engineer. Warp and tie the slopes into the adjacent existing roadway to match existing slopes and ditches. In addition to the requirements of Section 703, the Engineer may require additional hand placement of some or all of the Channel Lining. Provide positive drainage of pavement, shoulders, slopes, and ditches at all times during and upon completion of construction.

If sufficient quantities of excavation are not available to construct embankments, obtain borrow for embankment in place from approved sources off the right of way obtained by the Contractor at no additional cost to the Department. Waste excess excavation and excavation unsuitable for reuse at sites off the right of way obtained by the Contractor at no additional cost to the Department. See Special Note for Waste and Borrow.

Reconstruct shoulder areas with DGA to the approximate existing elevation and width of the adjacent undisturbed roadway typical section; however provide a minimum shoulder width of two (2) feet at each site. Provide positive drainage and do not allow water to pond on the shoulder area or at the shoulder edge. Reconstruct shoulders before installing guardrail, if required.

- **H. Retaining Wall Gabions.** Construct Gabion Walls according to Section 613.03.07.
- I. Guardrail. See Special Notes for Guardrail.
- **J. Asphalt Paving & Patching.** See Special Notes for Culvert Replacement for restoration of pavement over pipe trench. If deemed necessary by the Engineer, asphalt paving and patching other than the pipe trench may be performed by others as required.

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- **K. Final Dressing, Clean Up, and Seeding.** After all work is completed, perform Class A Final Dressing on all disturbed areas, both on and off the Right of-Way. Dispose of all waste and debris off the right of way at sites obtained by the Contractor at no additional cost to the Department. See Special Note for Waste and Borrow and Special Note for Erosion Control for additional requirements.
- **L. Property Damage.** Be responsible for all damage to public and/or private property resulting from the work. Restore all damaged property and other disturbed areas in like kind materials and design or as directed by the Engineer.
- **M. Disposal of Waste.** Dispose of all removed concrete, pipe, pavement, debris, excess and unsuitable excavation, and all other waste and debris at sites off the right of way obtained by the Contractor at no additional cost to the Department. See Special Note for Waste and Borrow.
- **N. On-Site Inspection.** Make a thorough inspection of the site prior to submitting bid and become thoroughly familiar with existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid as evidence of this inspection having been made. The Department will not honor any claims resulting from site conditions.
- **O. Right-of-Way Limits.** The Department has not established exact limits of Right-of-Way. Limit work activities to obvious Right-of-Way and work areas secured by the Department through Consent and Release of the adjacent property owners. Be responsible for all encroachments onto private lands.
- **P. Utility Clearance.** The Department has not located utilities. Locate all underground, above ground and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Work around and do not disturb existing utilities. Be responsible for repairing all utility damage that occurs as a result of the work

The Department does not anticipate that utilities will require relocation; however, if utility relocation is required, the utility companies will work concurrently with the Contractor while relocating their facilities. Notify the Engineer and the utility owner(s) immediately when it is discovered or anticipated that any utility conflict could delay the Contractor's operations. If utility relocation is required, the Department will not charge working days for those days on which work on the controlling item is delayed, as provided in the Specifications. If the total delay exceeds ten working days, an extension of the specified completion date will be negotiated with the Contractor for delay to the Contractor's work; however no extension will be granted for any delay caused by the Contractor's failure to notify the Engineer and/or the utility company as specified above when a conflict is discovered or anticipated. Comply with applicable sections of Chapter 107.

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- **Q. Caution.** Consider the information in this proposal and shown on the drawings and the type of work listed herein to be approximate only and do not take the information as an accurate evaluation of the materials and conditions to be encountered during construction. Be aware that any reference to rock, earth, excavation, embankment, or any other material on the drawings, whether in numbers or words, letters, or lines, is solely for the Department's information and is not to be taken as an indication of classified excavation or the quantity of either rock, earth, or any other material involved. The bidder must draw his own conclusions. The Department does not give any guarantee as to the accuracy of the data and will not consider any claims for money or time extensions if the conditions encountered are not in accordance with the information shown.
- **R. Control.** Perform all work included in this contract under the absolute control of the Department of Highways. Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to have other work performed by other contractors and its own forces and to permit public utility companies and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with each other's work will be reduced to a minimum. By submitting bid, the Contractor agrees to make no claims against the Department for additional compensation due to delays or other conditions created by the operations of such other parties. Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the work in general harmony and in a satisfactory manner, and his decision shall be final and binding upon the Contractor.

#### IV. METHOD OF MEASUREMENT

The Department will measure only the bid items listed for payment. The Department will consider all other items required to complete the work incidental to the listed items.

- **A. Maintain and Control Traffic.** See Traffic Control Plan; however, the Department will measure Maintain and Control Traffic as one Lump Sum for each route.
- **B. Site Preparation.** Other than the bid items listed, the Department will measure Site Preparation as one Lump Sum for each route.
- **C. Railroad Rail-Drilled.** The Department will measure drilled railroad rails in linear feet of finished in-place length. The Department will not measure cutoffs not used elsewhere in the work, rails rejected by the Engineer, excess, and waste. The

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Department will not measure the drilled sockets for separate payment, but shall be incidental to railroad Rails-Drilled; however, if the Engineer determines from the sounding obtained at a drilled socket that railroad rail piling cannot be used in that socket, 50% of the drilled depth will be measured for payment as Railroad Rail-Drilled.

- **D. Excavation and Backfill.** The Department will not measure backfill for the drilled sockets, but shall be incidental to Railroad Rail-Drilled. The Department will measure Excavation and Backfill behind cribbed railroad rails in Cubic Yards by field measurement according to Section 204 or other accepted methods of measurement determined by the Engineer.
- **E. Roadway Excavation and Embankment.** The Department will not measure excavation and embankment outside the limits of the railroad rails and cribbing for separate payment but shall be incidental to Site Preparation.
- **F. Geotextile Fabric.** The Department will measure Geotextile Fabric Type IV behind cribbed railroad rails in square yards of finished in place area. The Department will not measure laps, cutoffs, excess, and waste.
- **G. Erosion Control.** See Special Note for Erosion Control; however the Department will measure Erosion Control as one Lump Sum for each route.
- **H. Cribbing.** The Department will measure installed Cribbing furnished by the Department in square feet of finished in-place area. The Department will not measure laps, cutoffs, excess, and waste.
- **I. Guardrail.** See Special Notes for Guardrail.
- **J. Culvert Pipe.** See Special Notes for Culvert Pipe.
- **K. Retaining Walls Gabion.** Contrary to Section 613.04.02, the Department will field measure Gabion Walls in cubic yards. Contrary to Section 613.04.02, the Department will not measure structure excavation but shall be incidental to Site Preparation.
- **L. Staking.** See Special Notes for Staking.

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#### V. BASIS OF PAYMENT

The Department will not make direct payment other than for the bid items listed. The Department will consider payment for all other items required to complete the work incidental to the listed items

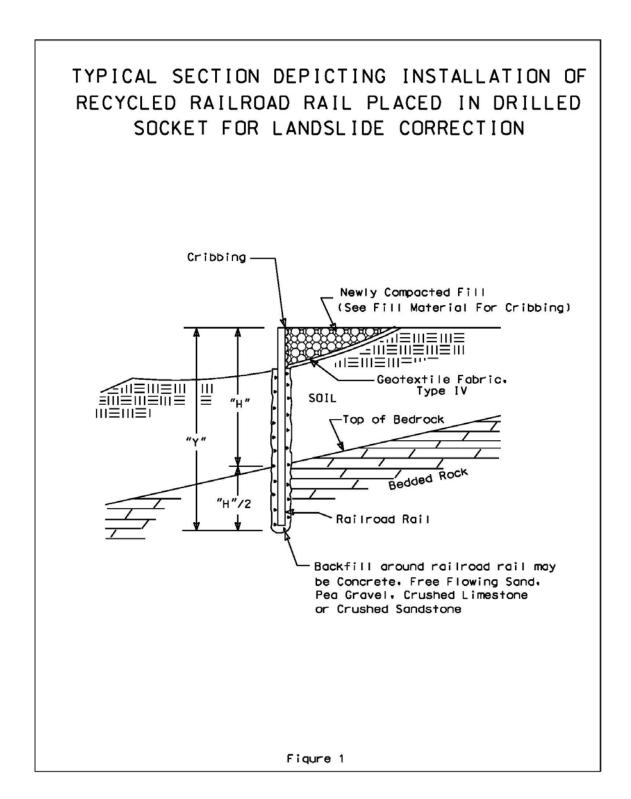
- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Site Preparation.** Accept payment at the Contract lump sum price for Site Preparation as full compensation for all labor, equipment, materials, and incidentals for clearing and grubbing, trenching, roadway and special excavation (except for excavation behind the drilled railroad rails for the crushed limestone backfill), structure excavation, embankment and embankment in place, removal of obstructions or any other items; disposal of materials; and final dressing and restoration.
- **C. Erosion Control.** See Special Note for Erosion Control.
- **D. Railroad Rail-Drilled.** Accept payment at the Contract unit price per linear foot of finished in place length as full compensation for all labor, equipment, materials, and incidentals necessary to drill the hole and socket, furnish and install the railroad rail, and backfill the hole and socket.
- **E. Cribbing.** Accept payment at the contract unit price per square foot of finished in place area as full compensation for all labor, equipment, materials, and incidentals necessary to pick up and load cribbing furnished by the Department, deliver cribbing to the project site, and install on the drilled railroad rails.
- **F. Excavation and Backfill.** Accept payment at the contract unit price per cubic yard of Excavation and Backfill as full compensation for all labor, equipment, materials and incidentals for excavating behind the drilled railroad rails, and furnishing and placing crushed limestone backfill wrapped in geotextile fabric behind the cribbed railroad rails.
- **G. Geotextile Fabric.** Accept payment at the contract unit price per square yard of finished in place area as full compensation for all labor, equipment, materials and incidentals for furnishing and placing Geotextile Fabric to wrap the crushed limestone backfill behind the cribbed railroad rails.
- **H. Guardrail.** See Special Notes for Guardrail.
- **I. Culvert Pipe.** See Special Notes for Culvert Pipe.
- **J. Retaining Wall Gabion.** See Section 613.05.
- **K. Staking.** See Special Notes for Staking.

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## IDENTIFICATION OF RAILROAD RAIL SIZES

- Typically classified in units of lbs-per-yard.
   Examples:
   155 lbs/yd, 140 lbs/yd, 132 lbs/yd, 90 lbs/yd
- Each rail has a classification stamped in web.
   Example:
   112 25 RE OH ILLINOIS USA 1935 IIIIII
   Weight in Ibs/yd

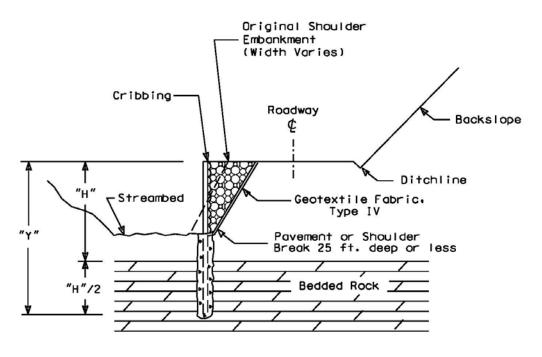
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# TYPICAL CROSS SECTION OF ROADWAY REPAIRS UTILIZING RECYCLED RAILROAD RAILS IN DRILLED SOCKETS FOR EMBANKMENT EROSION CORRECTION

NOTE: Spacing from edge to edge of drilled socket: 3 ft. max.



NOTE:
"H"/2 Depth of Rail into bedded rock =
1/3 total length where rock is present.

Figure 2

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## ALTERNATE SCHEMES FOR INSTALLING RAILROAD RAILS IN DRILLED SOCKETS

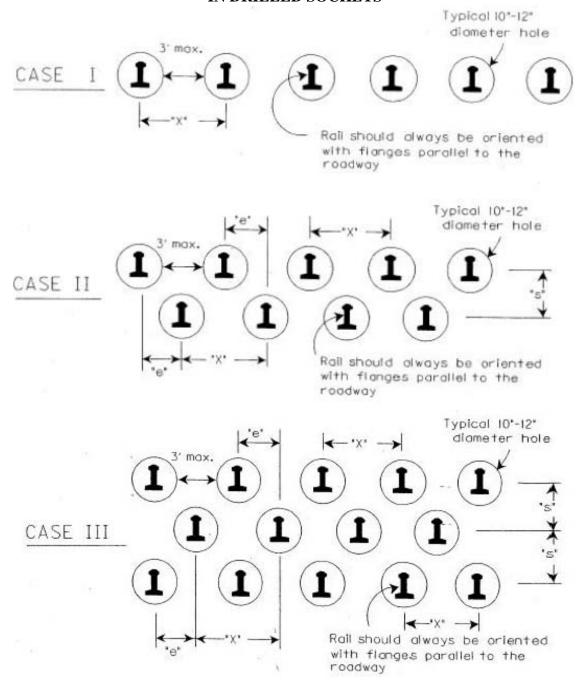


Figure 3

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# TABLE I DESIGN CHART 130LBS/YD TO 133 LBS/YD RECYCLED (USED) RAILROAD RAILS FACTOR OF SAFETY = 1

Soil Depth to Bedded Rock "H" (Feet)	Minimum Embedment into Bedded Rock	Total Length of Installed Railroad Rail "Y" (Feet)	Required Number of Rows	Maximum Spacing Between Rails "X" (Max.	Effective Spacing Between Rows
	"H/2" (Feet)			48") (Inches)	of Rails "e"" (Inches)
8	4	12	1	48	N/A
9	4.5	13.5	1	48	N/A
10	5	15	1	48	N/A
11	5.5	16.5	1	48	N/A
12	6	18	1	48	N/A
13	6.5	19.5	1	48	N/A
14	7	21	1	32	N/A
15	7.5	22.5	2	48	24
16	8	24	2	44	22
17	8.5	25.5	2	36	18
18	9	27	2	28	14
19	9.5	28.5	2	24	12
20	10	30	3	33	11
21	10.5	31.5	3	28.5	9.5
>21	N/A	N/A	N/A	N/A	N/A

**NOTES:** 

- 1. REFER TO FIGURES 1, 2, & 3 FOR DIMENSIONS SHOWN
- 2. FOR SOIL DEPTHS "H" GREATER THAN 21 FEET CONTACT THE ENGINEER.

#### SPECIAL NOTES FOR CULVERT PIPE REPLACEMENT FD51 058 VARS 1501000 KY 1750 @ MILEPOINT 3.648

#### I. DESCRIPTION

Except as hereafter specified, perform all work in accordance with the Department's 2008 Standard and Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings. Section references are to the Standard Specifications. This work shall consist of:

(1) Site preparation and erosion control; (2) Clearing and grubbing and removal of all obstructions; (3) Removal of existing structure; (4) Drilling and blasting, if required, and common and solid rock structure excavation; (5) Constructing Culvert Pipe; (6) Constructing embankment, roadway, pavement, and shoulders; (7) Restoration, final dressing, cleanup, and seeding; (8) Maintain and control traffic; (9) Staking; and (10) Any other work as specified by this contract.

#### I. MATERIALS AND DESIGN

All materials shall be sampled and tested in accordance with the Department's Sampling Manual. Make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these Notes.

- **A. Culvert Pipe.** Provide a 36" Aluminum Alloy or Corrugated Steel Culvert Pipe, designed for proposed fill cover height and pH range Low. Provide a certification that all materials furnished comply with the applicable specifications and these special notes. Prior to acceptance, the Department reserves the right to sample and test the pipe, accessories, and coating materials at any time. Materials or coating not conforming to contract requirements are subject to rejection, whether in place or not.
- **B. Foundation Preparation and Bedding.** Contrary to Section 701.02.04, furnish Crushed Limestone Size No. 8 wrapped in Geotextile Fabric Type III to stabilize the foundation. Furnish bedding materials according to Section 701.02.04.
- C. Channel Lining. Use Channel Lining Class III.
- **D. Guardrail.** See Special Notes for Guardrail.
- E. Erosion Control. See Erosion Control Plan.
- F. Maintain and Control Traffic. See Traffic Control Plan.

Culvert Replacement FD51 058 VARS 1501000 KY 1750 @ MILEPOINT 3.648 Page 2 of 6

**G. Pavement & Shoulder Restoration.** Use DGA, Class 2 Asphalt Base 1.00D PG64-22, and Class 2 Asphalt Surface 0.38D PG 64-22. Do not use Crushed Stone Base in lieu of DGA.

#### III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Erosion Control.** See Erosion Control Plan.
- **C. Staking.** See Special Notes for Staking.
- **D. Site Preparation.** Be responsible for all site preparation, including, but not limited to: clearing and grubbing; tree removal, common and solid rock excavation, structure excavation, backfilling and embankment in place; removal of existing culvert, obstructions, or any other items; disposal of materials, waste, and debris; temporary fencing to provide positive barrier to adjacent property owners livestock (if present); temporary and permanent erosion control; restoration, final dressing, cleanup, and seeding and protection. Perform all site preparation only as approved or directed by the Engineer.
- **E. Excavation and Removal of Existing Structures.** Prior to excavation and culvert removal, saw cut pavement to a neat edge and remove the existing culvert. Obtain the Engineer's approval of the trench width prior to saw cutting pavement or excavating trench. Close the road during the period allowed by the Traffic Control Plan and construct the pipe according to these notes and the Standard Specifications, or as directed by the Engineer. Be responsible for all common and solid rock and structure excavation, pavement removal, and removal of the existing structure. Provide positive drainage of slopes and ditches at all times during and upon completion of construction. Waste all removed materials at sites off the right of way obtained by the Contractor at no additional cost to the Department. Perform all excavation and removal of existing structure only as approved or directed by the Engineer.
- **F. Structure Excavation.** Be responsible for all excavation required for foundation preparation and all other excavation required by the work. Excavate rock in channel as required to allow for installation of bedding and pipe with the designed fill cover height. Provide positive drainage of slopes and ditches at all times during and upon completion of construction. Waste all excavation at sites off the right of way obtained by the Contractor at no additional cost to the Department. Perform all structure excavation only as approved or directed by the Engineer.

Culvert Replacement FD51 058 VARS 1501000 KY 1750 @ MILEPOINT 3.648 Page 3 of 6

- **G. Foundation Preparation and Bedding.** Contrary to Section 701.02.04, construct foundation of Crushed Limestone Size No. 8 wrapped in Geotextile Fabric Type III as directed by the Engineer. Construct minimum 2-foot thickness. Construct bedding according to Section 701.03.03.
- **H. Culvert Pipe.** Except as specified in these notes, construct the culvert pipe according to Section 701. Determine maximum and minimum fill cover heights and be responsible for field layout and survey of the proposed culvert. After removal of the existing structure, stabilize the foundation with the fabric wrapped granular aggregate. Determine and obtain the Engineer's approval of the final centerline, flow line and skew prior to removal of the existing pipe. Provide positive drainage upon completion of the project.
- **I. Backfill and Embankment.** Construct flowable fill, granular backfill, and embankments as directed by the Engineer. Warp finished slopes to match adjacent undisturbed slopes as directed by the Engineer. Provide positive drainage of slopes and ditches at all times during and upon completion of construction.
- **J. Channel Lining.** Place channel lining to protect pipe ends and slopes as directed by the Engineer. In addition to the requirements of section 703, additional hand placement may be required.
- **K.** Clean and Re-establish the Existing Shoulders and Ditches. Grade and restore the shoulders and ditches in the project limits to match the existing adjacent features to be left in place or as directed by the Engineer. Provide positive drainage of slopes and ditches at all times during and upon completion of construction.
- **L. Pavement & Shoulder Restoration.** Restore disturbed pavement and shoulders over the culvert trench to match the adjacent roadway. Provide positive drainage of pavement and shoulders at all times during and upon completion of construction. After constructing culvert, backfill, and embankment, construct DGA and asphalt base and reopen the road to traffic. After opening to traffic, correct settlement with additional DGA and asphalt base or surface as applicable, until the Engineer determines the culvert backfill and base are sufficiently stabilized to allow placement of final course of asphalt surface. If disturbed during construction, restore pavement and shoulders outside the culvert trench and approach. Once stabilized, construct final surface course and shoulders overall.
- M. Guardrail. See Special Note for Guardrail.
- **N. Final Dressing, Clean Up, and Seeding and Protection.** After all work is completed, completely remove debris from the construction site. Perform Class A Final Dressing on all disturbed areas, both on and off the Right of-Way. Sow all disturbed earthen areas according to the Special Note for Erosion Control.

Culvert Replacement FD51 058 VARS 1501000 KY 1750 @ MILEPOINT 3.648 Page 4 of 6

- **O. Disposal of Waste.** Dispose of all excess materials, waste, and debris off the right-of-way at approved sites obtained by the Contractor at no additional cost to the Department. See Special Note for Waste and Borrow.
- **P. Restoration.** Be responsible for all damage to public and/or private property resulting from the work. Restore all damaged features in like kind materials and design.
- **Q. On-Site Inspection.** Make a thorough inspection of the site prior to submitting a bid and be thoroughly familiar with existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid as evidence of this inspection having been made and will not honor any claims resulting from site conditions.
- **R. Caution.** Do not take information shown on the sketches and in this proposal and the types and quantities of work listed as an accurate or complete evaluation of the material and conditions to be encountered during construction. Without regard to the materials encountered, all roadway excavation shall be unclassified. It shall be distinctly understood that any reference to rock, earth, or any other material on the plans or cross sections, whether in numbers or words, letters, or lines, is solely for the Department's information and is not to be taken as an indication of classified excavation or the quantity of either rock, earth, or any other material involved. The bidder must draw his own conclusion as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation if the conditions encountered are not in accordance with the information shown.
- **S. Right-of-Way Limits.** The Department has not determined exact limits of Right-of-Way. Limit work activities to obvious Right-of-Way, permanent or temporary Easements, and work areas secured by the Department through consent and release of the adjacent property owners. Be responsible for all encroachments onto private lands.
- **T. Utility Clearance.** Work around and do not disturb existing utilities. It is not anticipated that any utility facilities will require relocation and/or adjustment; however, in the event utilities are discovered that require relocation, the utility companies will work concurrently with the Contractor while relocating their facilities. Working days will not be charged for those days on which work on the controlling item is delayed due to the utility company's phase of the work, as provided in the Specifications. If the total delay exceeds ten working days, an extension of the specified completion date will be negotiated with the Contractor for delay to the Contractor's work.

Culvert Replacement FD51 058 VARS 1501000 KY 1750 @ MILEPOINT 3.648 Page 5 of 6

#### IV. METHOD OF MEASUREMENT

The Department will measure only the bid items listed. Consider all other items required to complete the work as incidental to the listed items.

- **A. Maintain and Control Traffic.** See Traffic Control Plan.
- **B. Site Preparation.** Other than the bid items listed, the Department will measure Site Preparation as one lump sum.
- **C. Foundation Preparation.** The Department will measure Foundation Preparation as one lump sum. The Department will not measure Structure Excavation, Pipe Undercut, Crushed Limestone and Geotextile fabric used in culvert foundation and bedding, but shall be incidental to Foundation Preparation.
- **D. Channel Lining Class III.** The Department will measure Channel Lining Class III in tons.
- **E. Erosion Control.** See Special Notes for Erosion Control.
- **F. Clearing and Grubbing, Excavation and Embankment.** Contrary to Sections 202, 204, 205, and 206, the Department will not measure Clearing and Grubbing, Roadway Excavation, Borrow Excavation, and Embankment in Place for separate payment, but shall be incidental to Site Preparation.
- **G. Backfill Material.** The Department will not measure flowable fill and granular backfill materials, but shall be incidental to the culvert pipe.
- **H.** Culvert Pipe. The Department will measure the Culvert Pipe in linear feet according to Section 701.04.01. The Department will not measure culvert design for separate payment, but shall be incidental to the Culvert Pipe and Staking as applicable.
- **I. Restoration, Final Dressing, Clean Up, and Seeding and Protection.** The Department will not measure restoration, final dressing, clean up, and seeding and protection, but shall be incidental to Site Preparation and Erosion Control as applicable.
- **J. Staking.** See Special Note for Staking.

Culvert Replacement FD51 058 VARS 1501000 KY 1750 @ MILEPOINT 3.648 Page 6 of 6

#### V. Basis of Payment

The Department will make no direct payment other than for the bid items listed. All other items required to complete the construction shall be incidental to the bid items listed.

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B.** Culvert Pipe. Accept payment at the contract unit price per linear foot as full compensation for all materials, equipment, labor and incidentals necessary to complete the work as specified in these notes and the Standard Specifications for culvert design and for furnishing and installing the Culvert Pipe.
- **C. Foundation Preparation.** Accept payment at the contract lump sum unit price as full compensation for all materials, equipment, labor, and incidentals for structure excavation, geotextile fabric wrapped crushed limestone foundation, bedding, and all other expenses and all incidentals to prepare foundation and bedding for the Culvert Pipe.
- **D. Site Preparation.** Accept payment at the contract lump sum unit price as full compensation for all materials, equipment, labor, and incidentals, including, but not limited to: clearing and grubbing; temporary fencing to provide positive barrier to adjacent property owners livestock (if present); common and solid rock excavation, backfilling and embankment in place; removal of obstructions, or any other items; disposal of materials; cleaning inlet and outlet ditches; restoration, final dressing, and cleanup.
- **E. Erosion Control Plan.** See Special Notes for Erosion Control Plan.
- **F. Staking.** See Special Note for Staking.

#### SPECIAL NOTE FOR CONTRACTOR STAKING DRILLED RAILROAD RAIL & CHANNEL LINING REPAIRS FD51 058 VARS 1501000

Contrary to Section 201, perform only the following items:

- 1. Be responsible for field layout of the drilled railroad rails on designated spacing; and
- 2. Control the drilling and setting of the railroad rails to ensure the rails are plumb and installed at the designated spacing; and
- 3. Determine the height of rail that is needed to reestablish pavement and shoulder typical section and mark cut-offs; and
- 4. Establish proper slope elevations and ratios, shoulder widths, existing ditch profile, and final ditch profile to insure positive drainage.

Contrary to Section 201, the Department will not measure Contractor Staking for separate payment, but shall be incidental to the applicable items of the work.

Except as provided herein, the Department will perform Staking.

#### SPECIAL NOTE FOR CONTRACTOR STAKING CULVERT PIPE KY 1750 @ MILEPOINT 3.648

In addition to the requirements of Section 201, perform the following for the culvert on KY 1750 at milepoint 3.648:

- 1. Determine pipe section, skew, and flow line profile and revise as necessary to provide proper alignment of culvert with stream channels and the roadway and to provide positive drainage upon completion of construction; and
- 2. Establish typical section slopes to insure positive drainage upon completion of the work; and
- 3. Determine maximum and minimum fill cover heights and details to determine culvert gage and to insure positive drainage upon completion of the work; and
- 4. Produce and furnish the Engineer "As Built" plans; and
- 5. Perform any and all other staking operations required to design and construct the Culvert Pipe and to control the work.

The Department will measure staking for the Culvert on KY 1750 at milepoint 3.648 as one Lump Sum.

Accept payment at the Contract lump sum price as full compensation for all labor, equipment, materials, and incidentals for performing staking operations for the Culvert on KY 1750 at milepoint 3.648.

#### SPECIAL NOTE FOR LIQUIDATED DAMAGES

In addition to the requirements of Section 108.09, the Department will assess Liquidated Damages in the amount of \$2,000 per day for each calendar day or part of a calendar day a road closure remains in place beyond the time allowed by the Traffic Control Plan or during days prohibited by the Engineer.

Contrary to Sections 108.07.02 and 108.09, Liquidated Damages in the amount specified in Section 108.09 will be assessed for the months of December through March, regardless of whether seasonal or temperature limitations prohibit the Contractor from performing work on the controlling item or operation.

All liquidated damages will be applied accumulatively.

All other applicable portions of Section 108 apply.

JOHNSON COUNTY FD51 058 VARS 1501000

#### SPECIAL PROVISION FOR WASTE AND BORROW SITES

Obtain U.S. Army Corps of Engineer's approval before utilizing a waste or borrow site that involves "Waters of the United States". The Corps of Engineers defines "Waters of the United States" as perennial or intermittent streams, ponds or wetlands. The Corps of Engineers also considers ephemeral streams, typically dry except during rainfall but having a defined drainage channel, to be jurisdictional waters. Direct questions concerning any potential impacts to "Waters of the United States" to the attention of the appropriate District Office for the Corps of Engineers for a determination prior to disturbance. Be responsible for any fees associated with obtaining approval for waste and borrow sites from the U.S. Army Corps of Engineer or other appropriate regulatory agencies.

1-296 Waste & Borrow Sites 01/02/2012

#### COORDINATION OF WORK WITH OTHERS

Be advised, the Department may issue permits for work on the Department's right of way within the limits of this project. See Sections 107.06 and 107.14. The Engineer will coordinate the work of the Contractor and the permit holders.

Be advised, there may be an active project(s) adjacent to or within this project. The Engineer will coordinate the work of the Contractors. See Section 105.06.

Be advised the Department will be performing work adjacent to or within this project. The Engineer will coordinate the Department's operations with the Contractor's work. Allow sufficient time for the Department's available resources to complete its respective phases of the work. Delays due to inclement weather, shortage of materials, or other unforeseen causes may affect the Department's ability to complete its operations. Consider these factors when submitting a bid and scheduling work. The Department will not grant any time extension or monetary consideration, and will not consider any claims if the Department's forces are delayed in its operations.

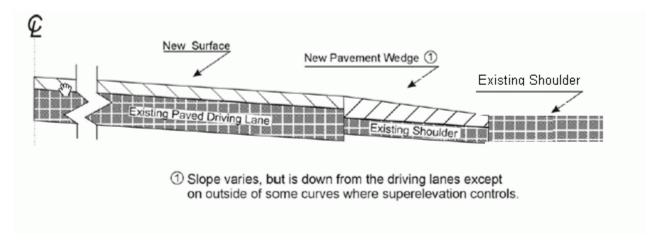
## SPECIAL NOTE FOR PAVEMENT WEDGE AND SHOULDER MONOLITHIC OPERATION

- **1.0 MATERIALS.** Provide an Asphalt Surface Mixture conforming to Section 403 of the Standard Specifications, as applicable to the project, for the pavement wedge.
- **2.0 CONSTRUCTION.** Place the specified Asphalt Surface Mixture on shoulders monolithically with the driving lane. Prime the existing shoulder with tack material as the Engineer directs before placing the wedge. Construct according to Section 403.03 of the Standard Specifications.

Equip the paver with a modified screed that extends the full width of the wedge being placed and is tapered to produce a wedge. Obtain the Engineer's approval of the modified screed before placing shoulder wedge monolithically with the driving lane.

The wedge may vary in thickness at the edge of the milled area in the shoulder. If the area to receive the shoulder wedge is milled prior to placement, during rolling operations pinch the outside edge of the new inlay wedge to match the existing shoulder elevation not being resurfaced. Unless required otherwise by the Contract, construct rolled or sawed rumble strips according to Section 403.03.08, as applicable.

The following sketch is primarily for the computation of quantities; however, the wedge will result in a similar cross-section where sufficient width exists. Do not construct a shoulder for placing the wedge unless specified elsewhere in the Contract.



- **3.0 MEASUREMENT.** The Department will measure Asphalt Surface Mixture placed as the pavement wedge according to Section 403.
- **4.0 PAYMENT.** The Department will make payment for the completed and accepted quantities of Asphalt Surface Mixtures on pavement wedges according to Section 403.

# SPECIAL NOTES FOR GUARDRAIL FD51 058 VARS 1501000

#### I. DESCRIPTION

Except as specified herein, perform all work in accordance with the Department's Standard and Supplemental Specifications and Standard and Sepia Drawings, current editions. Article references are to the Standard Specifications.

Furnish all equipment, labor, materials, and incidentals for the following work items:

- (1) Site preparation; (2) Removing Guardrail and End Treatments; (3) Removing and Resetting Guardrail; (4) Constructing Guardrail and End Treatments; (5) Maintain and Control traffic; and (6) All other work specified as part of this contract.
- II. MATERIALS

Except as specified herein, provide for all materials to be sampled and tested in accordance with the Department's Sampling Manual and make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing.

- A Maintain and Control Traffic. See Traffic Control Plan.
- **B. Remove & Reset Guardrail.** The Engineer will check the existing guardrail to be removed and reset before removal begins. If components are found missing or damaged to the extent that they cannot be reused, the Department will furnish the necessary parts and materials to the Contractor for installation when the guardrail is reset. The Department will make these parts available to the Contractor at the Department's Johnson County Maintenance facility. Reuse removed guardrail components. Be responsible for all damage to the existing guardrail system resulting from the work. Replace any parts that are damaged or lost during the guardrail removal and replacement process at no additional cost to the Department.
- **C. Guardrail Steel W Beam Single Face.** Furnish guardrail system components according to section 814 and the Standard and Sepia Drawings; except use steel posts only, no alternates.
- **D. Delineators for Guardrail.** Furnish Bi-directional White Delineators for Guardrail according to the Delineators for Guardrail Sepia Drawing.
- **E. Erosion Control.** See Special Notes for Erosion Control.

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#### III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Site Preparation.** Be responsible for all site preparation, including but not limited to, clearing and grubbing, excavation, embankment, and removal of all obstructions or any other items; regrading, reshaping, adding and compacting of suitable materials on the existing shoulders to provide proper template or foundation for the guardrail; temporary pollution and erosion control; disposal, of excess and waste materials and debris; and final dressing, cleanup, and seeding and protection. Perform all site preparation as approved or directed by the engineer.
- C. Guardrail. Remove existing guardrail and end treatments as shown on the summaries and/or as directed by the Engineer. Except as specified herein, construct guardrail system according to Section 719 and the Standard and Sepia Drawings. Reset guardrail and/or construct new guardrail as shown on the summaries and/or as directed by the Engineer. Obtain the Engineer's approval of the suitability of removed guardrail materials before reincorporating into the guardrail system. Consider locations listed on the summaries and/or shown on the drawings to be approximate only. The Engineer will determine the exact termini and type of guardrail for individual guardrail installations at the time of construction. Unless directed otherwise by the Engineer, provide a minimum two (2) foot shoulder width. Construct radii at entrances and road intersections as directed by the Engineer.

Contrary to Section 719.03.07, deliver guardrail components not reincorporated into the work to the Department's Johnson County Maintenance Facility.

Erect guardrail to the lines and grades shown on current Standard Drawings or as directed by the Engineer by any method approved by the Engineer which allows construction of the guardrail to the true grade without apparent sags.

When installing guardrail, do not leave the blunt end exposed where it would be hazardous to the public. When it is not practical to complete the construction of the guardrail and the permanent end treatments and terminal sections first, provide a temporary end by connecting at least 25 feet of rail to the last post, and by slightly flaring, and burying the end of the rail completely into the existing shoulder. If left overnight, place a drum with bridge panel in advance of the guardrail end and maintain during use.

- **D. Delineators for Guardrail.** Construct Delineators for Guardrail according to the Delineators for Guardrail Sepia Drawing.
- **E. Property Damage.** Be responsible for all damage to public and/or private property resulting from the work. Restore damaged roadway features and private property at no additional cost to the Department.

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- **F. Coordination with Utility Companies.** Locate all underground, above ground and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs as a result of guardrail operations at no additional cost to the Department.
- **G. Right of Way Limits**. The Department has not established exact limits of the Right-of-Way. Limit work activities to obvious Right-of-Way, permanent or temporary easements, and work areas secured by the Department through consent and release of the adjacent property owners. Be responsible for all encroachments onto private lands.
- **H. Disposal of Waste.** Dispose of all removed concrete, other waste, and debris off the Right-of-Way at sites obtained by the Contractor at no additional cost to the Department. See Special Note for Waste and Borrow.
- **I. Final Dressing, Clean Up, and Seeding and Protection.** Apply Class A Final Dressing to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas according to the Special Notes for Erosion Control.
- **J. Erosion Control.** See Special Notes for Erosion Control.

#### IV. METHOD OF MEASUREMENT

- **A. Maintain and Control Traffic.** See Traffic Control Plan.
- **B. Site preparation.** See Special Notes for Slide Repair.
- C. Guardrail. See Section 719.04.01.
- **D. Remove Guardrail.** See Section 719.04.08.
- **E. Remove End Treatments.** The Department will measure removed end treatments not attached to removed guardrail in individual units Each.
- **F. Remove and Reset Guardrail.** The Department will measure guardrail removed and reset according to Section 719.04.01; however the Department will include the length of removed end treatments attached to removed guardrail in the measured lengths of the removed guardrail.

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- G. Delineators for Guardrail. See Delineators for Guardrail Sepia Drawing.
- **H. Erosion Control.** See Special Notes for Erosion Control.

#### V. BASIS OF PAYMENT

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Site Preparation.** See Special Notes for Slide Repair.
- C. Guardrail. See Section 719.05.
- **D. Remove End Treatments.** Accept payment at the Contract unit price Each as full compensation for all labor, equipment, and materials and incidentals for removing end treatments, delivering salvageable components to the Department's Johnson County Maintenance Facility, and disposing of unsalvageable materials, waste, and debris.
- **E. Remove and Reset Guardrail.** Accept payment at the Contract unit price per Linear Foot as full compensation for all labor, equipment, and materials and incidentals for removing, storing, and resetting guardrail systems and disposing of waste and debris.
- F. Delineators for Guardrail. See Delineators for Guardrail Sepia Drawing.
- **G. Erosion Control.** See Special Notes for Erosion Control.

JOHNSON COUNTY FD51 058 VARS 1501000

#### SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

Consider the dimensions shown on the typical sections for pavement and shoulder widths and thickness' to be nominal or typical dimensions. The Engineer may direct or approve varying the actual dimensions to be constructed to fit existing conditions. Do not widen existing pavement or shoulders unless specified elsewhere in this proposal or directed by the engineer.

 $\begin{array}{c} 1\text{--}3725 \ Typical \ Section \ Dimensions} \\ 01/02/2012 \end{array}$ 

## TRAFFIC CONTROL PLAN FOR SLIDE CORRECTION FD51 058 VARS 1501000

#### TRAFFIC CONTROL GENERAL

Except as specified herein, maintain and control traffic in accordance with the Standard and Supplemental Specifications and the Standard and Sepia Drawings, current editions. Except for the roadway and traffic control bid items listed, furnish all other items necessary to maintain and control traffic incidental to the Contract lump sum price Maintain and Control Traffic.

Contrary to Section 106.01, furnish new, or used in like new condition, traffic control devices, at the beginning of the work and maintain the devices in like new condition until completion of the work.

#### PROJECT PHASING & CONSTRUCTION PROCEDURES

At the discretion of the Engineer, the Department may specify days and hours when lane closures will not be allowed. Prior to beginning work, provide a proposed lane closure and work schedule for the approval of the Engineer. The Department will provide public notification. Notify the Engineer immediately and obtain prior approval of any proposed deviations from the approved schedule.

Maintain alternating one way traffic during construction. Unless directed otherwise by the Engineer, provide a minimum clear lane width of eight (8) feet. If traffic should be stopped due to construction operations, and a school bus on an official run arrives on the scene, immediately make provisions for the passage of the bus.

If the Engineer determines that work site conditions require all traffic be stopped while drilling operations are in progress, stop traffic for the length of time required to drill and set one rail. Allow all waiting traffic to pass before starting the next hole. If an emergency vehicle or school bus is present in the queue, stop drilling and allow traffic to pass immediately.

#### LANE & SHOULDER CLOSURES

Do not leave lane closures in place during non-working hours. Shoulder closures may be maintained during nonworking hours; however do not park vehicles or store materials on a closed shoulder during non-working hours.

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#### **CHANGEABLE MESSAGE SIGNS**

If deemed necessary by the Engineer, the Department will furnish, operate, and maintain Changeable Message Signs.

#### **SIGNS**

The Engineer may require additional signing and/or traffic control devices in addition to the items shown on the Standard Drawings. Contrary to section 112.04.02, the Department will measure only long term signs (signs intended to be continuously in place for more than 3 days) for payment. The Department will not measure; short term signs (signs intended to be left in place for 3 days or less) for payment, but shall be incidental to Maintain and Control Traffic. Contrary to Section 112.04.02, the Department will measure individual signs only once for payment, regardless of how many times they are erected or relocated. The Department will not measure replacements for damaged signs directed by the Engineer to be replaced due to poor condition or reflectivity.

#### **BARRICADES**

The Department will not measure Barricades used in lieu of barrels and cones for channelization or delineation, but shall be incidental to Maintain and Control Traffic according to Section 112.04.01. The Department will measure Barricades used for protection of pavement removal areas and road closures according to Section 112.04.04. The Department will not measure replacements for damaged barricades directed by the Engineer to be replaced due to poor condition or reflectivity. Retain possession of the barricades upon completion of the work.

#### PAVEMENT EDGE DROP-OFFS

Do not allow a difference in elevation of a pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation greater than 1½". Place warning signs (MUTCD W8-9, W8-11, or W8-17) in advance of and at 1500 feet intervals throughout the drop-off area. Dual post the signs on both sides of the traveled way. Wedge transverse transitions between newly surfaced pavement and the existing pavement areas that traffic may cross with asphalt mixtures. Remove wedges prior to placement of the final surface course.

Treat pavement edges that traffic is not expected to cross, except accidentally, as follows:

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. The Engineer will allow cones to be used in lieu of plastic drums, panels, and barricades during daylight working hours only. Wedge drop-offs within 10 feet of traffic with

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stone or asphalt mixtures as directed or approved by the Engineer with a 1:1 or flatter slope in daylight working hours, or 3:1 or flatter slope during nighttime hours or when work is not active in the drop-off area.

Greater than 4" – Protect drop-offs greater than 4 inches within 10 feet of traffic by placing drums, vertical panels, or barricades every 25 feet. The Engineer will not allow the use of cones in lieu of drums, vertical panels, or barricades for drop-offs greater than 4". Place Type III Barricades directly in front of the drop-off facing oncoming traffic in both directions of travel. Provide warning signs as shown on the Standard Drawings or as directed by the Engineer.

Pedestrians and Bicycles – Protect pedestrians and bicycles as directed by the Engineer.

# TRAFFIC CONTROL PLAN FD51 058 VARS 1501000 KY 1750 – CULVERT REPLACEMENT

#### TRAFFIC CONTROL GENERAL

Except as specified herein, maintain and control traffic in accordance with the Standard and Supplemental Specifications and the Standard and Sepia Drawings, current editions. Except for the roadway and traffic control bid items listed, furnish all other items necessary to maintain and control traffic incidental to the Contract lump sum price Maintain and Control Traffic.

Contrary to Section 106.01, furnish new, or used in like new condition, traffic control devices, at the beginning of the work and maintain the devices in like new condition until completion of the work.

#### PROJECT PHASING & CONSTRUCTION PROCEDURES

The Department will allow a single weekend road closure from 6:00p.m. Friday through 6:00 a.m. Monday to remove and replace the culvert subject to the following conditions:

- 1. A road closure will be permitted for a single weekend period of the Contractor's choosing for removal and replacement of the culver to allow work to progress to the point that the road can be reopened; however, in no case will a closure be permitted on days the Johnson County Schools are in regular session. Obtain the Engineer's approval of a work schedule prior beginning work.
- 2. At all other times, when required by the work in progress, maintain alternating one way traffic. At the discretion of the Engineer, days and hours may be specified when lane closures will not be allowed.
- 3. Be responsible for road closure, work zone signs, and physically barricading the site and closing the road to through traffic. Notify the Engineer immediately of any anticipated or proposed deviations from the approved work schedule. The Department will provide public notification and detour signing as deemed necessary by the Engineer.
- 4. Close road during the approved period, remove existing culvert, construct the new culvert, backfill the culvert, and restore slopes over the culvert trench and reopen the road within the approved time period.
- 5. The Department will not require the Contractor to provide continuous access to single family, duplex, or triplex residential properties or farms during working hours; however, the Contractor shall provide reasonable egress and ingress to each such property when actual operations are not in progress at that location. The time

Traffic Control Plan FD51 058 VARS 1501000 KY 1750 – Culvert Replacement Page 2 of 5

during which a residential entrance is blocked shall be the minimum length of time required for actual operations, shall not be extended for the Contractor's convenience, and in no case shall exceed six (6) hours. The Contractor shall notify all residents twenty-four hours in advance of any driveway or entrance closings and shall make any accommodations necessary to meet the access needs of disabled residents.

- 6. Maintain local traffic and provide access to side streets and roads, schools, churches, commercial properties and apartments or apartment complexes of four or more units at all times.
- 7. The Department will make payment at the contract unit prices bid for DGA and asphalt materials required to construct and maintain any temporary entrances which may be necessary to provide temporary access; however, the Department will not make direct payment for temporary pipe, excavation, and/or embankment needed. The Engineer will determine the type of surfacing material, asphalt or aggregate, to be used at each entrance.

If required, The Department will allow blasting only during the period when the road is closed to through traffic. Halt local traffic, blast, clean the existing pavement and return traffic to normal local traffic operation subject to the following conditions:

- 1. Halt all local traffic at a safe distance, as determined by the Engineer, on either side of the impending explosion.
- 2. Halt Traffic a maximum of 15 minutes per hour to allow the execution of the "shot" and to allow for removal of rock fragments and debris.
- 3. Have suitable equipment at the site and in a running mode for the purpose of cleaning the existing pavement.
- 4. Immediately after any blast, inspect the pavement for any debris that may be a hazard to traffic prior to allowing traffic to proceed. Return traffic to normal operation in the least amount of time possible.

At all other times during construction, maintain alternating one way traffic during working hours. Unless directed otherwise by the Engineer, provide a minimum clear lane width of eight (8) feet. If traffic should be stopped due to construction operations, and a school bus on an official run arrives on the scene, immediately make provisions for the passage of the bus.

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#### LANE & SHOULDER CLOSURES

Except for the allowable days specified in the phasing for road closure to place and backfill the culvert, do not leave lane closures in place during non-working hours. Shoulder closures may be maintained during nonworking hours; however do not park vehicles or store materials on a closed shoulder during non-working hours.

#### CHANGEABLE MESSAGE SIGNS

If deemed necessary by the Engineer, the Department will furnish, operate, and maintain Changeable Message Signs.

#### **SIGNS**

The Engineer may require additional signing and/or traffic control devices in addition to the items shown on the Standard Drawings. Contrary to section 112.04.02, the Department will measure only long term signs (signs intended to be continuously in place for more than 3 days) for payment. The Department will not measure; short term signs (signs intended to be left in place for 3 days or less) for payment, but shall be incidental to Maintain and Control Traffic. Contrary to Section 112.04.02, the Department will measure individual signs only once for payment, regardless of how many times they are erected or relocated. The Department will not measure replacements for damaged signs directed by the Engineer to be replaced due to poor condition or reflectivity.

#### **BARRICADES**

The Department will not measure Barricades used in lieu of barrels and cones for channelization or delineation, but shall be incidental to Maintain and Control Traffic according to Section 112.04.01. The Department will measure Barricades used for protection of pavement removal areas and road closures according to Section 112.04.04. Retain possession of the barricades upon completion of the work. The Department will not measure replacements for damaged barricades directed by the Engineer to be replaced due to poor condition or reflectivity. Retain possession of the barricades upon completion of the work.

#### PAVEMENT EDGE DROP-OFFS

Do not allow a difference in elevation of a pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation greater than 1½". Place warning signs (MUTCD W8-9, W8-11, or W8-17) in advance of and at 1500 feet intervals throughout the drop-off area. Dual post the signs on both sides of the traveled way. Wedge transverse transitions

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between newly surfaced pavement and the existing pavement areas that traffic may cross with asphalt mixtures. Remove wedges prior to placement of the final surface course.

Treat pavement edges that traffic is not expected to cross, except accidentally, as follows:

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. The Engineer will allow cones to be used in lieu of plastic drums, panels, and barricades during daylight working hours only. Wedge drop-offs within 10 feet of traffic with stone or asphalt mixtures as directed or approved by the Engineer with a 1:1 or flatter slope in daylight working hours, or 3:1 or flatter slope during nighttime hours or when work is not active in the drop-off area.

Greater than 4" – Protect drop-offs greater than 4 inches within 10 feet of traffic by placing drums, vertical panels, or barricades every 25 feet. The Engineer will not allow the use of cones in lieu of drums, vertical panels, or barricades for drop-offs greater than 4". Place Type III Barricades directly in front of the drop-off facing oncoming traffic in both directions of travel. Provide warning signs as shown on the Standard Drawings or as directed by the Engineer.

Pedestrians and Bicycles – Protect pedestrians and bicycles as directed by the Engineer.

#### SPECIAL NOTE FOR EROSION CONTROL

#### I. DESCRIPTION

Perform all erosion and water pollution control work in accordance with the Department's Standard and Interim Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions, and as directed by the Engineer. Section references are to the Standard Specifications. This work shall consist of:

(1) Developing and preparing a Best Management Practices Plan (BMP) tailored to suit the specific construction phasing for each site within the project; (2) Preparing the project site for construction, including locating, furnishing, installing, and maintaining temporary and/or permanent erosion and water pollution control measures as required by the BMP prior to beginning any earth disturbing activity on the project site; (3) Clearing and grubbing and removal of all obstructions as required for construction; (4) Removing all erosion control devices when no longer needed; (5) Restoring all disturbed areas as nearly as possible to their original condition; (6) Preparing seedbeds and permanently seeding all disturbed areas; (7) Providing a Kentucky Erosion Prevention and Sediment Control Program (KEPSC) qualified inspector; and (8) Performing any other work to prevent erosion and/or water pollution as specified by this contract, required by the BMP, or as directed by the Engineer.

#### II. MATERIALS

Furnish materials in accordance with these notes, the Standard Specifications and Interim Supplemental Specifications, and applicable Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions. Provide for all materials to be sampled and tested in accordance with the Department's Sampling Manual. Unless directed otherwise by the Engineer, make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing.

#### III. CONSTRUCTION

Be advised, these Erosion Control Plan Notes do not constitute a BMP plan for the project. Jointly with the Engineer, prepare a site specific BMP plan for each drainage area within the project in accordance with Section 213. Provide a unique BMP at each project site using good engineering practices taking into account existing site conditions, the type of work to be performed, and the construction phasing, methods and techniques to be utilized to complete the work. Be responsible for all erosion prevention, sediment control, and water pollution prevention measures required by the BMP for each site. Represent and warrant compliance with the Clean Water Act (33 USC Section 1251 et seq.), the 404 Permit, the 401 Water Quality Certification, and applicable state and

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local government agency laws, regulations, rules, specifications, and permits. Contrary to Section 105.05, in case of discrepancy between theses notes, the Standard Specifications, Interim Supplemental Specifications, Special and Special Notes, Standard and Sepia Drawings, and such state and local government agency requirements, adhere to the most restrictive requirement.

Conduct operations in such a manner as to minimize the amount of disturbed ground during each phase of the construction and limit the haul roads to the minimum required to perform the work. Preserve existing vegetation not required to be removed by the work or the contract. Seed and/or mulch disturbed areas at the earliest opportunity. Use silt fence, silt traps, temporary ditches, brush barriers, erosion control blankets, sodding, channel lining, and other erosion control measures in a timely manner as required by the BMP and as directed or approved by the Engineer. Prevent sediment laden water from leaving the project, entering an existing drainage structure, or entering a stream.

Provide for erosion control measures to be in place and functioning prior to any earth disturbance within a drainage area. Compute the volume and size of silt control devices necessary to control sediment during each phase of construction. Remove sediment from silt traps before they become a maximum of ½ full. Maintain silt fence by removing accumulated trappings and/or replacing the geotextile fabric when it becomes clogged, damaged, or deteriorated, or when directed by the Engineer. Properly dispose of all materials trapped by erosion control devices at approved sites off the right of way obtained by the Contractor at no additional cost to the Department (See Special Note for Waste and Borrow).

As work progresses, add or remove erosion control measures as required by the BMP applicable to the Contractor's project phasing and construction methods and techniques. Update the volume calculations and modify the BMP as necessary throughout the duration of the project. Ensure that an updated BMP is kept on site and available for public inspection throughout the life of the project.

After all construction is complete, restore all disturbed areas in accordance with Section 212. Completely remove all temporary erosion control devices not required as part of the permanent erosion control from the construction site. Prior to removal, obtain the Engineer's concurrence of items to be removed. Grade the remaining exposed earth (both on and off the Right of-Way) as nearly as possible to its original condition, or as directed by the Engineer. Prepare the seed bed areas and sow all exposed earthen areas with the applicable seed mixture(s) according to Section 212.03.03.

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#### IV. MEASUREMENT

**Erosion Control Blanket.** If required by the BMP, the Department will measure Erosion Control Blanket according to Section 212.04.07.

**Sodding.** If required by the BMP, the Department will measure Sodding according to Section 212.04.08.

**Channel Lining.** If required by the BMP, the Department will measure Channel Lining according to Sections 703.04.04-703.04.07.

Erosion Control. Contrary to Sections 212.04, 213.04, and 703.04 other than Erosion Control Blankets, Sodding, and Channel Lining, the Department will measure Erosion Control as one lump sum. The Department will not measure developing, updating, and maintaining a BMP plan for each site; providing a KEPSC qualified inspector; locating, furnishing, installing, inspecting, maintaining, and removing erosion and water pollution control items; Roadway Excavation, Borrow Excavation, Embankment In Place, Topsoil Furnished and Placed, and Spreading Stockpiled Topsoil; Topdressing Fertilizer, Temporary and Permanent Seeding and Protection, Special Seeding Crown Vetch, and Temporary Mulch; Sedimentation Basin and Clean Sedimentation Basin, Silt Trap Type "A" and Clean Silt Trap Type "A"; Silt Trap Type "B" and Clean Silt Trap Type "B"; Silt Trap Type "C" and Clean Silt Trap Type "C"; Temporary Silt Fence and Clean Temporary Silt Fence; Plants, Vines, Shrubs, and Trees; Gabion and Dumped Stone Deflectors and Riffle Structures; Boulders; Temporary Ditches and clean Temporary Ditches; Geotextile Fabric, and all other erosion and water pollution control items required by the BMP or the Engineer, but shall be incidental to Erosion Control.

# V. Basis of Payment

**Erosion Control Blanket.** If not listed as a bid item, but required by the BMP, the Department will pay for Erosion Control Blankets as Extra Work according to Sections 104.03 and 109.04.

**Sodding.** If not listed as a bid item, but required by the BMP, the Department will pay for Sodding as Extra Work according to Sections 104.03 and 109.04.

**Channel Lining.** If not listed as a bid item, but required by the BMP, the Department will pay for Channel Lining as Extra Work according to Sections 104.03 and 109.04.

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> Erosion Control. Contrary to Sections 212.05 and 213.05, other than Erosion Control Blanket, Sodding, and Channel Lining, payment at the Contract lump sum price for Erosion Control, shall be full compensation for all materials, equipment, labor and incidentals necessary to complete the erosion and water pollution control work as specified in these notes, Sections 212 and 213, the Supplemental Specifications, applicable Special Provisions and Special Notes, and Standard and Sepia Drawings, including but not limited to developing, updating, and maintaining a BMP plan for each site; providing a KEPSC qualified inspector; locating, furnishing, installing, inspecting, maintaining, and removing erosion and water pollution control items; Roadway Excavation, Borrow Excavation, Embankment In Place, Topsoil Furnished and Placed, and Spreading Stockpiled Topsoil; Topdressing Fertilizer, Temporary and Permanent Seeding and Protection, Special Seeding Crown Vetch, and Temporary Mulch; Sedimentation Basin and Clean Sedimentation Basin, Silt Trap Type "A" and Clean Silt Trap Type "A"; Silt Trap Type "B" and Clean Silt Trap Type "B"; Silt Trap Type "C" and Clean Silt Trap Type "C"; Temporary Silt Fence and Clean Temporary Silt Fence; Plants, Vines, Shrubs, and Trees; Gabion and Dumped Stone Deflectors and Riffle Structures; Boulders; Temporary Ditches and clean Temporary Ditches; Geotextile Fabric and all other erosion and water pollution control items required by the BMP or the Engineer.

1-561 erosion Control Note for Maintenance Projects 06/08/2012



# Nationwide Permit No. 14, Linear Transportation Projects

Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States.

- a. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States.
- b. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.
- c. This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.
- d. This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds

1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 31.) (Sections 10 and 404)

Note: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

Valid from March 19, 2012 through March 18, 2017

# **Nationwide Permit General Conditions**

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR §§ 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR § 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

- 1. <u>Navigation</u>. (a) No activity may cause more than a minimal adverse effect on navigation.
- (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.
- (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- 2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.
- 3. <u>Spawning Areas</u>. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
- 4. <u>Migratory Bird Breeding Areas</u>. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
- 5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.
  - 6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car

bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

- 7. <u>Water Supply Intakes</u>. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
- 8. <u>Adverse Effects From Impoundments</u>. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
- 9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).
- 10. <u>Fills Within 100-Year Floodplains</u>. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.
- 11. <u>Equipment</u>. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- 12. <u>Soil Erosion and Sediment Controls</u>. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.
- 13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
- 14. <u>Proper Maintenance</u>. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.
- 15. <u>Single and Complete Project</u>. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.
- 16. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River

designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

- 17. <u>Tribal Rights</u>. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
- 18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.
- (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary.
- (c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete preconstruction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
- (d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.
- (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

- (f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide web pages at http://www.fws.gov/ or <a href="http://www.fws.gov/ipac">http://www.fws.gov/ipac</a> and <a href="http://www.noaa.gov/fisheries.html">http://www.noaa.gov/fisheries.html</a> respectively.
- 19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for obtaining any "take" permits required under the U.S. Fish and Wildlife Service's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such "take" permits are required for a particular activity.
- 20. <u>Historic Properties</u>. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.
- (b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.
- (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties on which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.
- (d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must

still wait for notification from the Corps.

- (e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.
- 21. <u>Discovery of Previously Unknown Remains and Artifacts</u>. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
- 22. <u>Designated Critical Resource Waters</u>. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.
- (a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.
- (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.
- 23. <u>Mitigation</u>. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:
- (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

- (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.
- (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.
- (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment.
- (2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.
- (3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).
- (4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.
- (5) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.
- (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.
- (e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.
- (f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist

of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

- (g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.
- (h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.
- 24. <u>Safety of Impoundment Structures</u>. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.
- 25. <u>Water Quality</u>. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.
- 26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.
- 27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with

any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

- 28. <u>Use of Multiple Nationwide Permits</u>. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.
- 29. <u>Transfer of Nationwide Permit Verifications</u>. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)	 	 	
(Date)	 	 	

- 30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:
- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(1)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and
  - (c) The signature of the permittee certifying the completion of the work and mitigation.

- 31. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:
- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).
- (b) <u>Contents of Pre-Construction Notification</u>: The PCN must be in writing and include the following information:
  - (1) Name, address and telephone numbers of the prospective permittee;
  - (2) Location of the proposed project;
- (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative

description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

- (4) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;
- (5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.
- (6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and
- (7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.
- (c) <u>Form of Pre-Construction Notification</u>: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.
- (d) <u>Agency Coordination</u>: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.
- (2) For all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, and for all NWP 48 activities that require pre-construction notification, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments.

The comments must explain why the agency believes the adverse effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

- (3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.
- (4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

### D. District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. For a linear project, this determination will include an evaluation of the individual crossings to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to intermittent or ephemeral streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51 or 52, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in minimal adverse effects. When making minimal effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

- 2. If the proposed activity requires a PCN and will result in a loss of greater than 1/10acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.
- 3. If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (a) that the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (c) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period, with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

# E. Further Information

- 1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
- 2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
  - 3. NWPs do not grant any property rights or exclusive privileges.
  - 4. NWPs do not authorize any injury to the property or rights of others.
  - 5. NWPs do not authorize interference with any existing or proposed Federal project.

# GENERAL WATER QUALITY CERTIFICATION & NATIONWIDE PERMIT

Perform all work in accordance with the attached General Water Quality Certification and Corps of Engineers Nationwide Permit #14. Provide all work crews and subcontractors copies of the attachments and require the attachments to be present at all active worksites when operations are in progress. Present the attachments to regulators and inspectors upon request.

In addition to the requirements of the General Certification and Nationwide Permit, comply with the following requirements:

If the work requires deviation from the attachments, notify the Engineer and do not proceed without written permission from the Kentucky Division of Water (KDW).

Although not specifically mentioned in the attachments, do not grout rip rap unless the Engineer provides written permission from the KDW.

Do not operate machinery in any waterway. If instream work is unavoidable, obtain concurrence from the Engineer before beginning work.

STEVEN L. BESHEAR GOVERNOR LEONARD K. PETERS SECRETARY

#### **ENERGY AND ENVIRONMENTAL PROTECTION CABINET**

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
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# General Certification--Nationwide Permit # 14 Linear Transportation Projects

This General Certification is issued March 19, 2012, in conformity with the requirements of Section 401 of the Clean Water Act of 1977, as amended (33 U.S.C. §1341), as well as Kentucky Statute KRS 224.16-050.

For this and all nationwide permits, the definition of surface water is as per 401 KAR 10:001 Chapter 10, Section 1(80): Surface Waters means those waters having well-defined banks and beds, either constantly or intermittently flowing; lakes and impounded waters; marshes and wetlands; and any subterranean waters flowing in well-defined channels and having a demonstrable hydrologic connection with the surface. Lagoons used for waste treatment and effluent ditches that are situated on property owned, leased, or under valid easement by a permitted discharger are not considered to be surface waters of the commonwealth.

Agricultural operations, as defined by KRS 224.71-100(1) conducting activities pursuant to KRS 224.71-100 (3), (4), (5), (6), or 10 are deemed to have certification if they are implementing an Agriculture Water Quality Plan pursuant to KRS 224.71-145.

For all other operations, the Commonwealth of Kentucky hereby certifies under Section 401 of the Clean Water Act (CWA) that it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 10, established pursuant to Sections 301, 302, 304, 306 and 307 of the CWA, will not be violated for the activity covered under NATIONWIDE PERMIT 14, namely Linear Transportation Projects, provided that the following conditions are met:

- The activity will not occur within surface waters of the Commonwealth identified by the Kentucky Division of Water as Outstanding State or National Resource Water, Cold Water Aquatic Habitat, or Exceptional Waters.
- 2. The activity will not occur within surface waters of the Commonwealth identified as perpetually-protected (e.g. deed restriction, conservation easement) mitigation sites.
- 3. The activity will impact less than 1/2 acre of wetland/marsh.
- 4. The activity will impact less than 300 linear feet of surface waters of the Commonwealth. Stream realignment greater than 100 feet is not covered under this general water quality certification.



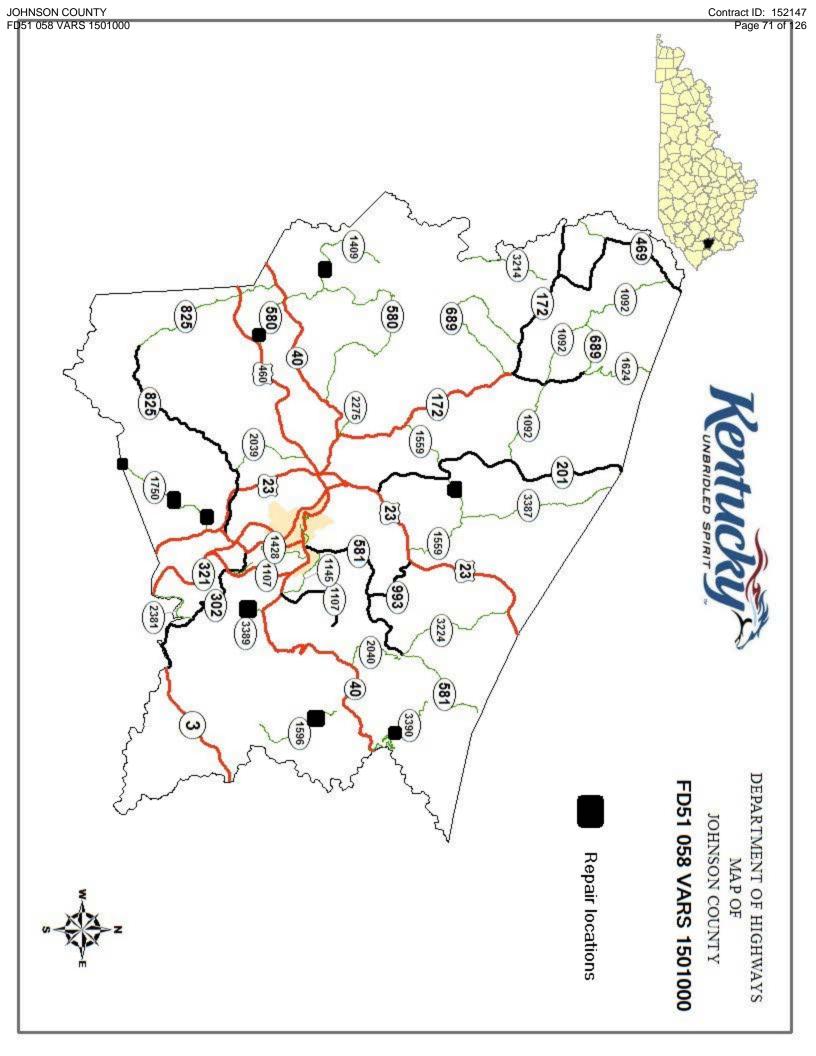
# General Certification--Nationwide Permit # 14 Linear Transportation Projects Page 2

- For a single and complete linear transportation project, the cumulative length of impacts less than 300 linear feet of surface waters within each Hydrologic Unit Code (HUC) 14 watershed will not exceed 500 linear feet.
- Stream impacts covered under this General Water Quality Certification and undertaken by those persons defined as an agricultural operation under the Agricultural Water Quality Act must be completed in compliance with the Kentucky Agricultural Water Quality Plan (KWQP).
- 7. The Kentucky Division of Water may require submission of a formal application for an individual certification for any project if the project has been determined to likely have a significant adverse effect upon water quality or degrade the waters of the Commonwealth so that existing uses of the water body or downstream waters are precluded.
- 8. Activities that do not meet the conditions of this General Water Quality Certification require an Individual Section 401 Water Quality Certification.
- 9. Activities qualifying for coverage under this General Water Quality Certification are subject to the following conditions:
  - Erosion and sedimentation pollution control plans and Best Management Practices must be designed, installed, and maintained in effective operating condition at all times during construction activities so that violations of state water quality standards do not occur (401 KAR 10:031 Section 2 and KRS 224.70-100).
  - Sediment and erosion control measures, such as check-dams constructed of any material, silt fencing, hay bales, etc., shall not be placed within surface waters of the Commonwealth, either temporarily or permanently, without prior approval by the Kentucky Division of Water's Water Quality Certification Section. If placement of sediment and erosion control measures in surface waters is unavoidable, design and placement of temporary erosion control measures shall not be conducted in such a manner that may result in instability of streams that are adjacent to, upstream, or downstream of the structures. All sediment and erosion control devices shall be removed and the natural grade restored within the completion timeline of the activities.
  - Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering the watercourse.
  - Removal of riparian vegetation in the utility line right-of-way shall be limited to that necessary for equipment access.
  - To the maximum extent practicable, all in-stream work under this certification shall be performed under low-flow conditions.

# General Certification--Nationwide Permit # 14 Linear Transportation Projects Page 2

- Heavy equipment, e.g. bulldozers, backhoes, draglines, etc., if required for this project, should not be used or operated within the stream channel. In those instances in which such in-stream work is unavoidable, then it shall be performed in such a manner and duration as to minimize turbidity and disturbance to substrates and bank or riparian vegetation.
- Any fill shall be of such composition that it will not adversely affect the biological, chemical, or physical properties of the receiving waters and/or cause violations of water quality standards. If rip-rap is utilized, it should be of such weight and size that bank stress or slump conditions will not be created because of its placement.
- If there are water supply intakes located downstream that may be affected by increased turbidity and suspended solids, the permittee shall notify the operator when such work will be done.
- Should evidence of stream pollution or jurisdictional wetland impairment and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the KDOW shall be notified immediately by calling (800) 928-2380.

Non-compliance with the conditions of this general certification or violation of Kentucky state water quality standards may result in civil penalties.



**(Y 580** 

	N <del>-</del>	Site
	0.415 0.426	Mile Point
	115 35	Length
	10	Cribbing Depth (FT)
	4 4	Excavation Width (FT)
	2 2 6 6	Depth to Rock (FT)
		Number of Rows
TOTALS	ယ ယ	Rail Spacing (FT)
1500	1150 350	Cribbing Amount (SQ FT)
2030	1520 510	RR Steel (LF)
225	170 55	Excav. & Backfill (CY)
400	305 95	tile SY)
225	* *	Guardrail (LF)
2		End Treatment Type 7 (EACH)
10	N 00	DGA (TON)
I		İ

\* Guardrail both sections continuous totaling 225 LF and 2 type 7's.

# **KY 1409**

		2	_	Site			
		1.482	0.372	Mile Point			
		50	40	Length			
		10	8	(FT)	Depth	Cribbing	
		4	4		Width		
		26	26	(FT)	Rock	Depth to	
		_	1	Rows	Number o		
TOTALS		ω	3	(FT)	f Spacing	Rail	
835		520	315	(SQ FT)	Amount	Cribbing	
1285		740	545	(LF)	RR Steel		
130		80	50	(CY)	Backfill	Excav. &	
230.00		140	90	Fabric (SY)	Geotextile	Type IV	
112.5		62.5	50	(LF)	Guardrail	and Reset	Remove
7		4	ω	(TON)	DGA		
ļ	ı		ļ				

# **KY 1559**

	2.242	nt			
	25	Length			
	6	Depth	Cribbing		
	4	Width	Excavation		
	26	Rock	Depth to		
	1	Rows	Depth to Number of		
TOTALS	ω	(FT)	of Spacing	Rail	
150	150	(SQ FT)	Amount	Cribbing	
390	390	(LF)	RR Steel		
25	25	(CY)	Backfill	Excav. &	
45	45	Fabric (SY)	Geotextile	Excav. & Type IV and Reset	
25	25	(LF)	Guardrail	and Reset	אמווסעם מוויסעם
2	2	(TON)	DGA		

# **(Y 1596**

_		100	270	175	1290	1000	TOTALS	_						
	2	50	160	115	705	600	ω	_	26	ഗ	12	50	2.385	2
	2	50	110	60	585	400	3	1	26	4	10	40	2.331	_
	(EACH	(LF)	Fabric (SY)	(CY)	(LF)	(SQ FT)	(FT)	Rows	(FT)	(FT)	(FT)	Length	Mile Point	Site
DGA	Type 7	W Beam	Geotextile	Backfill	RR Steel	Amount	Spacing	Number of	Rock	Width	Depth			
₽	Treatme	Steel	Type IV	Excav. &		Cribbing	Rail		Depth to	Excavation	Cribbing			
	End	Guardrail												

	З	2	_	Site					
	3.648	1.748	0.018	Mile Point					
	15	43	35	Length					
	15		13	(FT)	Depth	Cribbing			
	4		4	(FT)	Width	Excavation			
	26		26	(FT)	Rock	Depth to			
	_		1	of Rows	Number				
TOTALS	З		3	(FT)	Spacing	Rail			
680	225		455	(SQ FT)	Amount	Cribbing			
745	235		510	(LF)	RR Steel				
105	35		70	(CY)	Backfill	Excav. &			
175	55		120	(SY)	Fabric	Geotextile	Type IV		
37.5	37.5			(LF)	Guardrail	& Reset	Remove		
50			50	(LF)	W-Beam	Steel	Guardrail		
2			2	(EACH)	Type 7	Treatment	End		
55	10	45		(TON)	Lining	Channel	Class III		
30	30			(LF)	Pipe 36"	Culvert			
35	2	30	3	(TON)	DGA				
30		30		(Ton)	PG64-22	1.00D	Base	Asphalt	CL2
15		15		(Ton)	PG64-22	0.38D	Surface	Asphalt	CL2

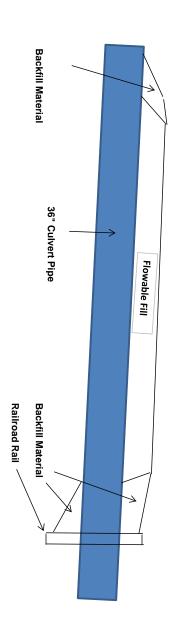
Site 2: Riprap 43' long, 7' wide, and 5' deep. Use Class III Channel Lining.

Site 1: New guardrail 50 LF and 2 Type 7 End Treatments

Site 3: Remove and reset 37.5 LF Guardrail.

Remove existing culvert and replace with 36" culvert pipe 30 LF.
Inlet = 7x7x1.5 Channel Lining Class III

Outlet= 7x10x1.5 Channel Lining Class III



(Y 3389

	Ν	1	Site
	0.800	0.080	Mile Point
		40	Length
		11	Cribbing Depth (FT)
		4	Excavation Width (FT)
		26	Depth to Rock (FT)
		1	Number of Rows
TOTALS		3	Rail Spacing (FT)
430	0	430	Cribbing (SQ FT)
585	0	585	RR Steel (LF)
65	0	65	Excav. & Backfill (CY)
115	0.00	115.00	Type IV Geotextile Fabric (SY)
50	0	50	Guardrail Steel W-Beam (LF)
2	0	2	End Treatments Type 7 (EACH)
12	12	0	Gabions (CY)
သ	0	3	DGA (TON)

Site 1 will have 50 LF of guardrail and 2 Type 7 end treatments Site 2 will be 3 - 12'x3'x3' Gabion Baskets = 12 cy.

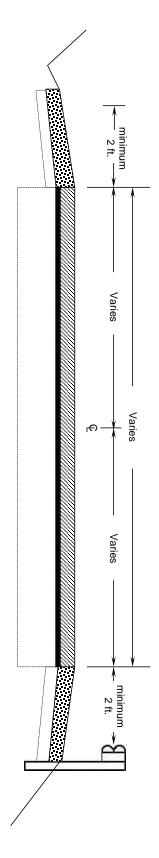
**KY 3390** 

	4 70	ω	2	1	Site		
	2.351	2.112	1.816	1.733	Mile Point		
	35 &	8 8	60	95	Length		
	7 6	, ω	œ	8	(FT)	Depth	Cribbing
	4 4	4.	4	4	(FT)	Width	Excavation
	10	6 6	26	26	(FT)	Rock	Depth to
		` _	_	1	Rows	_	
TOTALS	ωω	υ	ω	3	(FT)	Spacing	Rail
2185	245	520	480	760	(SQ FT)	Amount	Cribbing
2830	195	345	820	1290	(LF)	RR Steel	
330	40	25	70	115	(CY)	Backfill	Excav. &
340	70	140	130	210	Fabric (SY)		Type IV
175	00	0	75	100	(LF)	Guardrail	Remove and Reset
		_			(EACH)	Treatment	Remove End
175	37.5	137.5			(LF)	Beam	Guardrail End Steel W· Treatment
ယ	N	_			(EACH)	Type 7	End Treatment
25	4 ω	. Oī	Οī	8	(TON)	DGA	

Sites 3, 4: Remove End Treatment, Construct 137.5 LF Guardrail & 1 Type 7 End Treatment.

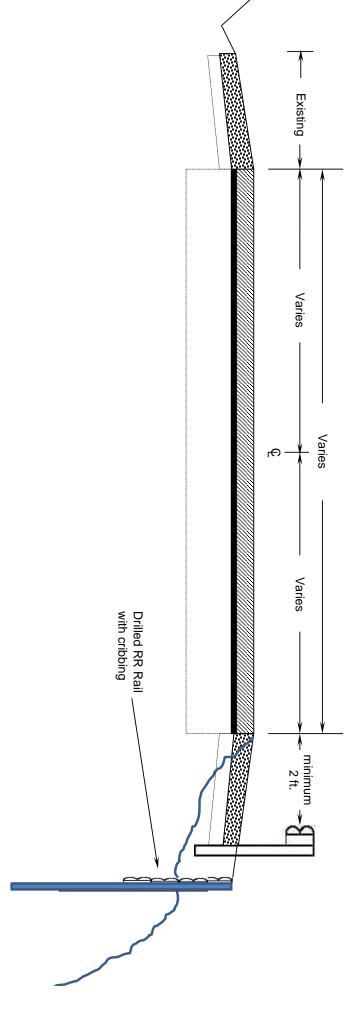
Site 5: Construct 37.5 LF Guardrail & 2 Type 7 End Treatments.

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# GUARDRAIL TYPICAL SECTION FD51 058 VARS 1501000

# DRILLED RAILROAD RAIL WITH GUARDRAIL TYPICAL SECTION FD51 058 VARS 1501000



### PART II

### SPECIFICATIONS AND STANDARD DRAWINGS

### **SPECIFICATIONS REFERENCE**

Any reference in the plans or proposal to previous editions of the *Standard Specifications* for Road and Bridge Construction and Standard Drawings are superseded by Standard Specifications for Road and Bridge Construction, Edition of 2012 and Standard Drawings, Edition of 2012 with the 2012 Revision.

<b>Subsection:</b>	102.15 Process Agent.
<b>Revision:</b>	Replace the 1st paragraph with the following:
	Every corporation doing business with the Department shall submit evidence of compliance with
	KRS Sections 14A.4-010, 271B.11-010, 271B.11-070, 271B.11-080, 271B.5-010 and 271B.16-
	220, and file with the Department the name and address of the process agent upon whom process
	may be served.
<b>Subsection:</b>	105.13 Claims Resolution Process.
<b>Revision:</b>	Delete all references to TC 63-34 and TC 63-44 from the subsection as these forms are no longer
	available through the forms library and are forms generated within the AASHTO SiteManager
	software.
<b>Subsection:</b>	108.03 Preconstruction Conference.
Revision:	Replace 8) Staking with the following:
	8) Staking (designated by a Professional Engineer or Land Surveyor licensed in the
	Commonwealth of Kentucky.
<b>Subsection:</b>	109.07.02 Fuel.
Revision:	Revise item Crushed Aggregate Used for Embankment Stabilization to the following:
	Crushed Aggregate
	Used for Stabilization of Unsuitable Materials
	Used for Embankment Stabilization
	Delete the following item from the table.
	Crushed Sandstone Base (Cement Treated)
	110.02 Demobilization.
<b>Revision:</b>	Replace the first part of the first sentence of the second paragraph with the following:
	Perform all work and operations necessary to accomplish final clean-up as specified in the first
	paragraph of Subsection 105.12;
<b>Subsection:</b>	112.03.12 Project Traffic Coordinator (PTC).
Revision:	Replace the last paragraph of this subsection with the following:
	Ensure the designated PTC has sufficient skill and experience to properly perform the task
	assigned and has successfully completed the qualification courses.
<b>Subsection:</b>	112.04.18 Diversions (By-Pass Detours).
<b>Revision:</b>	Insert the following sentence after the 2nd sentence of this subsection.
	The Department will not measure temporary drainage structures for payment when the contract
	documents provide the required drainage opening that must be maintained with the diversion.
	The temporary drainage structures shall be incidental to the construction of the diversion. If the
	contract documents fail to provide the required drainage opening needed for the diversion, the
	cost of the temporary drainage structure will be handled as extra work in accordance with section
	109.04.
	201.03.01 Contractor Staking.
Revision:	Replace the first paragraph with the following: Perform all necessary surveying under the
	general supervision of a Professional Engineer or Land Surveyor licensed in the Commonwealth
	of Kentucky.

<b>Subsection:</b>	201.04.01 Contractor Staking.
<b>Revision:</b>	Replace the last sentence of the paragraph with the following: Complete the general layout of
	the project under the supervision of a Professional Engineer or Land Surveyor licensed in the
	Commonwealth of Kentucky.
<b>Subsection:</b>	206.04.01 Embankment-in-Place.
<b>Revision:</b>	Replace the fourth paragraph with the following: The Department will not measure suitable
	excavation included in the original plans that is disposed of for payment and will consider it
	incidental to Embankment-in-Place.
<b>Subsection:</b>	208.02.01 Cement.
<b>Revision:</b>	Replace paragraph with the following:
	Select Type I or Type II cement conforming to Section 801. Use the same type cement
	throughout the work.
	208.03.06 Curing and Protection.
<b>Revision:</b>	Replace the fourth paragraph with the following:
	Do not allow traffic or equipment on the finished surface until the stabilized subgrade has cured
	for a total of 7-days with an ambient air temperature above 40 degrees Fahrenheit. A curing day
	consists of a continuous 24-hour period in which the ambient air temperature does not fall below
	40 degrees Fahrenheit. Curing days will not be calculated consecutively, but must total seven (7)
	, 24-hour days with the ambient air temperature remaining at or above 40 degrees Fahrenheit
	before traffic or equipment will be allowed to traverse the stabilized subgrade. The Department
	may allow a shortened curing period when the Contractor requests. The Contractor shall give the
	Department at least 3 day notice of the request for a shortened curing period. The Department
	will require a minimum of 3 curing days after final compaction. The Contractor shall furnish
	cores to the treated depth of the roadbed at 500 feet intervals for each lane when a shortened
	curing time is requested. The Department will test cores using an unconfined compression test.
	Roadbed cores must achieve a minimum strength requirement of 80 psi.
	208.03.06 Curing and Protection.
Revision:	Replace paragraph eight with the following:
	At no expense to the Department, repair any damage to the subgrade caused by freezing.
	212.03.03 Permanent Seeding and Protection.
Part:	A) Seed Mixtures for Permanent Seeding.
Revision:	Revise <b>Seed Mix Type I</b> to the mixture shown below:
	50% Kentucky 31 Tall Fescue (Festuca arundinacea)
	35% Hard Fescue (Festuca (Festuca longifolia)
	10% Ryegrass, Perennial (Lolium perenne)
C1	5% White Dutch Clover (Trifolium repens)
	212.03.03 Permanent Seeding and Protection.
Part: Number:	A) Seed Mixtures for Permanent Seeding.
	2) Penlace the paragraph with the following:
	Replace the paragraph with the following:  Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 4. 5. 6. and 7. Apply seed
	Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 4, 5, 6, and 7. Apply seed mix Type II at a minimum application rate of 100 pounds per acre. If adjacent to a golf course
	replace the crown vetch with Kentucky 31 Tall Fescue.
	replace the crown veten with Kentucky 31 Tan Pescue.

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G 1	212.22.22.2
	212.03.03 Permanent Seeding and Protection.
Part:	A) Seed Mixtures for Permanent Seeding.
Number:	[3]
<b>Revision:</b>	Replace the paragraph with the following:
	Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 1, 2, 3, 8, 9, 10, 11, and 12.
	Apply seed mix Type III at a minimum application rate of 100 pounds per acre. If adjacent to
	crop land or golf course, replace the Sericea Lespedeza with Kentucky 31 Fescue.
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.
Part:	B) Procedures for Permanent Seeding.
Revision:	Delete the first sentence of the section.
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.
Part:	B) Procedures for Permanent Seeding.
<b>Revision:</b>	Replace the second and third sentence of the section with the following:
	Prepare a seedbed and apply an initial fertilizer that contains a minimum of 100 pounds of
	nitrogen, 100 pounds of phosphate, and 100 pounds of potash per acre. Apply agricultural
	limestone to the seedbed when the Engineer determines it is needed. When required, place
	agricultural limestone at a rate of 3 tons per acre.
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.
Part:	D) Top Dressing.
<b>Revision:</b>	Change the title of part to D) Fertilizer.
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.
Part:	D) Fertilizer.
<b>Revision:</b>	Replace the first paragraph with the following:
	Apply fertilizer at the beginning of the seeding operation and after vegetation is established. Use
	fertilizer delivered to the project in bags or bulk. Apply initial fertilizer to all areas prior to the
	seeding or sodding operation at the application rate specified in 212.03.03 B). Apply 20-10-10
	fertilizer to the areas after vegetation has been established at a rate of 11.5 pounds per 1,000
	square feet. Obtain approval from the Engineer prior to the 2nd fertilizer application. Reapply
	fertilizer to any area that has a streaked appearance. The reapplication shall be at no additional
	cost to the Department. Re-establish any vegetation severely damaged or destroyed because of
	an excessive application of fertilizer at no cost to the Department.
<b>Subsection:</b>	212.03.03 Permanent Seeding and Protection.
Part:	D) Fertilizer.
Revision:	Delete the second paragraph.
<b>Subsection:</b>	212.04.04 Agricultural Limestone.
<b>Revision:</b>	Replace the entire section with the following:
	The Department will measure the quantity of agricultural limestone in tons.
<b>Subsection:</b>	212.04.05 Fertilizer.
<b>Revision:</b>	Replace the entire section with the following:
	The Department will measure fertilizer used in the seeding or sodding operations for payment.
	The Department will measure the quantity by tons.
-	

Subsection:	212.05 PAYMENT.					
Revision:	Delete the following item code:					
ite vision.	Code Pay Item Pay Unit					
	05966 Topdressing Fertilizer Ton					
Subsection:	212.05 PAYMENT.					
Revision:	Add the following pay items:					
	Code Pay Item Pay Unit					
	05963 Initial Fertilizer Ton					
	05964 20-10-10 Fertilizer Ton					
	05992 Agricultural Limestone Ton					
<b>Subsection:</b>	213.03.02 Progress Requirements.					
Revision:	Replace the last sentence of the third paragraph with the following:					
	Additionally, the Department will apply a penalty equal to the liquidated damages when all					
	aspects of the work are not coordinated in an acceptable manner within 7 calendar days after					
	written notification.					
<b>Subsection:</b>	213.03.05 Temporary Control Measures.					
Part:	E) Temporary Seeding and Protection.					
Revision:	Delete the second sentence of the first paragraph.					
<b>Subsection:</b>	304.02.01 Physical Properties.					
Table:	Required Geogrid Properties					
Revision:	Replace all references to Test Method "GRI-GG2-87" with ASTM D 7737.					
	402.03.02 Contractor Quality Control and Department Acceptance.					
Part:	B) Sampling.					
Revision:	Replace the second sentence with the following:					
	The Department will determine when to obtain the quality control samples using the random-					
	number feature of the mix design submittal and approval spreadsheet. The Department will					
	randomly determine when to obtain the verification samples required in Subsections 402.03.03					
Cubaadian	and 402.03.04 using the Asphalt Mixture Sample Random Tonnage Generator.					
Part:	402.03.02 Contractor Quality Control and Department Acceptance.  D) Testing Responsibilities.					
Number:	3) VMA.					
Revision:	'					
Kevision.	Add the following paragraph below Number 3) VMA:  Patein the AV/VMA specimens and one additional corresponding G sample for 5 working					
	Retain the AV/VMA specimens and one additional corresponding G <sub>mm</sub> sample for 5 working					
	days for mixture verification testing by the Department. For Specialty Mixtures, retain a mixture sample for 5 working days for mixture verification testing by the Department. When the					
	Department's test results do not verify that the Contractor's quality control test results are within					
	the acceptable tolerances according to Subsection 402.03.03, retain the samples and specimens					
	from the affected sublot(s) for the duration of the project.					
Subsection:	402.03.02 Contractor Quality Control and Department Acceptance.					
Part:	D) Testing Responsibilities.					
Number:	4) Density.					
Revision:	Replace the second sentence of the Option A paragraph with the following:					
	Perform coring by the end of the following work day.					
<u> </u>						

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## Supplemental Specifications to the Standard Specifications for Road and Bridge Construction, 2012 Edition Effective with the August 22, 2014 Letting

**Subsection:** 402.03.02 Contractor Quality Control and Department Acceptance.

Part: D) Testing Responsibilities.

**Number:** 5) Gradation.

**Revision:** Delete the second paragraph.

**Subsection:** 402.03.02 Contractor Quality Control and Department Acceptance.

Part: H) Unsatisfactory Work.
Number: 1) Based on Lab Data.

**Revision:** Replace the second paragraph with the following:

When the Engineer determines that safety concerns or other considerations prohibit an immediate shutdown, continue work and the Department will make an evaluation of acceptability according to Subsection 402.03.05.

to Subsection 402.03.03

**Subsection:** 402.03.03 Verification.

**Revision:** Replace the first paragraph with the following:

402.03.03 Mixture Verification. For volumetric properties, the Department will perform a minimum of one verification test for AC, AV, and VMA according to the corresponding procedures as given in Subsection 402.03.02. The Department will randomly determine when to obtain the verification sample using the Asphalt Mixture Sample Random Tonnage Generator. For specialty mixtures, the Department will perform one AC and one gradation determination per lot according to the corresponding procedures as given in Subsection 402.03.02. However, Department personnel will not perform AC determinations according to KM 64-405. The Contractor will obtain a quality control sample at the same time the Department obtains the mixture verification sample and perform testing according to the procedures given in Subsection 402.03.02. If the Contractor's quality control sample is verified by the Department's test results within the tolerances provided below, the Contractor's sample will serve as the quality control sample for the affected sublot. The Department may perform the mixture verification test on the Contractor's equipment or on the Department's equipment.

Subsection: 4

402.03.03 Verification.

**Part:** A) Evaluation of Sublot(s) Verified by Department.

**Revision:** Replace the third sentence of the second paragraph with the following:

When the paired t-test indicates that the Contractor's data and Department's data are possibly not from the same population, the Department will investigate the cause for the difference according to Subsection 402.03.05 and implement corrective measures as the Engineer deems appropriate.

**Subsection:** 402.03.03 Verification.

**Part:** B) Evaluation of Sublots Not Verified by Department.

**Revision:** Replace the third sentence of the first paragraph with the following:

When differences between test results are not within the tolerances listed below, the Department will resolve the discrepancy according to Subsection 402.03.05.

Subsection:	402.03.03 Verification.
Part:	B) Evaluation of Sublots Not Verified by Department.
<b>Revision:</b>	Replace the third sentence of the second paragraph with the following:
	When the $F$ -test or $t$ -test indicates that the Contractor's data and Department's data are possibly
	not from the same population, the Department will investigate the cause for the difference
	according to Subsection 402.03.05 and implement corrective measures as the Engineer deems
	appropriate.
<b>Subsection:</b>	402.03.03 Verification.
Part:	C) Test Data Patterns.
Revision:	Replace the second sentence with the following:
	When patterns indicate substantial differences between the verified and non-verified sublots, the
	Department will perform further comparative testing according to subsection 402.03.05.
<b>Subsection:</b>	402.03 CONSTRUCTION.
Revision:	Add the following subsection: 402.03.04 Testing Equipment and Technician Verification.
	For mixtures with a minimum quantity of 20,000 tons and for every 20,000 tons thereafter, the
	Department will obtain an additional verification sample at random using the Asphalt Mixture
	Sample Random Tonnage Generator in order to verify the integrity of the Contractor's and
	Department's laboratory testing equipment and technicians. The Department will obtain a
	mixture sample of at least 150 lb at the asphalt mixing plant according to KM 64-425 and split it
	according to AASHTO R 47. The Department will retain one split portion of the sample and
	provide the other portion to the Contractor. At a later time convenient to both parties, the
	Department and Contractor will simultaneously reheat the sample to the specified compaction
	temperature and test the mixture for AV and VMA using separate laboratory equipment
	according to the corresponding procedures given in Subsection 402.03.02. The Department will
	evaluate the differences in test results between the two laboratories. When the difference
	between the results for AV or VMA is not within $\pm 2.0$ percent, the Department will investigate
	and resolve the discrepancy according to Subsection 402.03.05.
<b>Subsection:</b>	402.03.04 Dispute Resolution.
<b>Revision:</b>	Change the subsection number to 402.03.05.
Subsection:	402.05 PAYMENT.
Part:	Lot Pay Adjustment Schedule Compaction Option A Base and Binder Mixtures
Table:	AC
<b>Revision:</b>	Replace the Deviation from JMF(%) that corresponds to a Pay Value of 0.95 to ±0.6.
	403.02.10 Material Transfer Vehicle (MTV).
Revision:	Replace the first sentence with the following:
	In addition to the equipment specified above, provide a MTV with the following minimum
	characteristics:
	412.02.09 Material Transfer Vehicle (MTV).
Revision:	Replace the paragraph with the following:
	Provide and utilize a MTV with the minimum characteristics outlined in section 403.02.10.

Subsection:	412.03.07 Placement and Compaction.
	Replace the first paragraph with the following:
	Use a MTV when placing SMA mixture in the driving lanes. The MTV is not required on ramps
	and/or shoulders unless specified in the contract. When the Engineer determines the use of the
	MTV is not practical for a portion of the project, the Engineer may waive its requirement for that
	portion of pavement by a letter documenting the waiver.
	412.04 MEASUREMENT.
	Add the following subsection:
	412.04.03. Material Transfer Vehicle (MTV). The Department will not measure the MTV for
	payment and will consider its use incidental to the asphalt mixture.
	501.03.19 Surface Tolerances and Testing Surface.
	B) Ride Quality.
	Add the following to the end of the first paragraph:
	The Department will specify if the ride quality requirements are Category A or Category B when
	ride quality is specified in the Contract. Category B ride quality requirements shall apply when
	the Department fails to classify which ride quality requirement will apply to the Contract.
<b>Subsection:</b>	603.03.06 Cofferdams.
Revision:	Replace the seventh sentence of paragraph one with the following:
	Submit drawings that are stamped by a Professional Engineer licensed in the Commonwealth of
	Kentucky.
<b>Subsection:</b>	605.03.04 Tack Welding.
Revision:	Insert the subsection and the following:
	605.03.04 Tack Welding. The Department does not allow tack welding.
<b>Subsection:</b>	606.03.17 Special Requirements for Latex Concrete Overlays.
Part:	A) Existing Bridges and New Structures.
Number:	1) Prewetting and Grout-Bond Coat.
Revision:	Add the following sentence to the last paragraph: Do not apply a grout-bond coat on bridge
	decks prepared by hydrodemolition.
<b>Subsection:</b>	609.03 Construction.
Revision:	Replace Subsection 609.03.01 with the following:
	609.03.01 A) Swinging the Spans. Before placing concrete slabs on steel spans or precast
	concrete release the temporary erection supports under the bridge and swing the span free on its
	supports.
	609.03.01 B) Lift Loops. Cut all lift loops flush with the top of the precast beam once the beam
	is placed in the final location and prior to placing steel reinforcement. At locations where lift
	loops are cut, paint the top of the beam with galvanized or epoxy paint.
	611.03.02 Precast Unit Construction.
Revision:	Replace the first sentence of the subsection with the following:
	Construct units according to ASTM C1577, replacing Table 1 (Design Requirements for
	Precast Concrete Box Sections Under Earth, Dead and HL-93 Live Load Conditions) with
	KY Table 1 (Precast Culvert KYHL-93 Design Table), and Section 605 with the following
	exceptions and additions:

Subsection:	613.03.01 Design.
Number:	2)
Revision:	Replace "AASHTO Standard Specifications for Highway Bridges" with "AASHTO LRFD
Kevision.	Bridge Design Specifications"
<b>Subsection:</b>	615.06.02
Revision:	Add the following sentence to the end of the subsection.
	The ends of units shall be normal to walls and centerline except exposed edges shall be beveled
G. L	34 inch.
	615.06.03 Placement of Reinforcement in Precast 3-Sided Units.
Revision:	Replace the reference of 6.6 in the section to 615.06.06.
Subsection:	615.06.04 Placement of Reinforcement for Precast Endwalls.
Revision:	Replace the reference of 6.7 in the section to 615.06.07.
<b>Subsection:</b>	615.06.06 Laps, Welds, and Spacing for Precast 3-Sided Units.
Revision:	Replace the subsection with the following:
	Tension splices in the circumferential reinforcement shall be made by lapping. Laps may not be
	tack welded together for assembly purposes. For smooth welded wire fabric, the overlap shall
	meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO
	2012 Bridge Design Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall
	meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO
	2012 Bridge Design Guide Section 5.11.6.2. The overlap of welded wire fabric shall be measured
	between the outer most longitudinal wires of each fabric sheet. For deformed billet-steel bars,
	the overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section
	5.11.2.1. For splices other than tension splices, the overlap shall be a minimum of 12" for welded
	wire fabric or deformed billet-steel bars. The spacing center to center of the circumferential wires
	in a wire fabric sheet shall be no less than 2 inches and no more than 4 inches. The spacing
	center to center of the longitudinal wires shall not be more than 8 inches. The spacing center to
	center of the longitudinal distribution steel for either line of reinforcing in the top slab shall be
	not more than 16 inches.
Subsection:	615.06.07 Laps, Welds, and Spacing for Precast Endwalls.
Revision:	Replace the subsection with the following:
	Splices in the reinforcement shall be made by lapping. Laps may not be tack welded together for
	assembly purposes. For smooth welded wire fabric, the overlap shall meet the requirements of
	AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO 2012 Bridge Design
	Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall meet the
	requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO 2012
	Bridge Design Guide Section 5.11.6.2. For deformed billet-steel bars, the overlap shall meet the
	requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.1. The spacing center-to-
	center of the wire fabric sheet shall not be less than 2 inches or more than 8 inches.
	center of the wife faulte sheet shall not be less than 2 fiches of filore than 8 filches.

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<b>Subsection:</b>	615.08.01 Type of Test Specimen.
Revision:	Replace the subsection with the following:
	Start-up slump, air content, unit weight, and temperature tests will be performed each day on the
	first batch of concrete. Acceptable start-up results are required for production of the first unit.
	After the first unit has been established, random acceptance testing is performed daily for each
	50 yd <sup>3</sup> (or fraction thereof). In addition to the slump, air content, unit weight, and temperature
	tests, a minimum of one set of cylinders shall be required each time plastic property testing is
	performed.
<b>Subsection:</b>	615.08.02 Compression Testing.
Revision:	Delete the second sentence.
<b>Subsection:</b>	615.08.04 Acceptability of Core Tests.
Revision:	Delete the entire subsection.
<b>Subsection:</b>	615.12 Inspection.
Revision:	Add the following sentences to the end of the subsection: Units will arrive at jobsite with the
	"Kentucky Oval" stamped on the unit which is an indication of acceptable inspection at the
	production facility. Units shall be inspected upon arrival for any evidence of damage resulting
	from transport to the jobsite.
<b>Subsection:</b>	716.02.02 Paint.
Revision:	Replace sentence with the following: Conform to Section 821.
<b>Subsection:</b>	716.03 CONSTRUCTION.
Revision:	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural
	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current
	interims,
<b>Subsection:</b>	716.03.02 Lighting Standard Installation.
Revision:	Replace the second sentence with the following:
	Regardless of the station and offset noted, locate all poles/bases behind the guardrail a minimum
	of four feet from the front face of the guardrail to the front face of the pole base.
<b>Subsection:</b>	716.03.02 Lighting Standard Installation.
Part:	A) Conventional Installation.
Revision:	Replace the third sentence with the following: Orient the transformer base so the door is
	positioned on the side away from on-coming traffic.
Subsection:	716.03.02 Lighting Standard Installation.
Part:	A) Conventional Installation.
Number:	1) Breakaway Installation and Requirements.
Revision:	Replace the first sentence with the following: For breakaway supports, conform to Section 12 of
	the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires,
G 1 (*	and Traffic Signals, 2013-6th Edition with current interims.
Subsection:	716.03.02 Lighting Standard Installation.
Part:	B) High Mast Installation
Revision:	Replace the first sentence with the following: Install each high mast pole as noted on plans.
Subsection:	716.03.02 Lighting Standard Installation.
Part:	B) High Mast Installation
Number:	2) Concrete Base Installation  Modification of Chart and avagading paragraphs within this section:
<b>Revision:</b>	Modification of Chart and succeeding paragraphs within this section:

Drilled Shaft Depth Data							
		3:1 Ground		2:1 Ground		1.5:1 Ground	
Level Ground		Slope		Slope		Slope (2)	
Soil	Rock	Soil	Rock	Soil	Rock	Soil	Rock
17 ft	7 ft	19 ft	7 ft	20 ft	7 ft	(1)	7 ft

Steel Requirements Vertical Bars Ties or Spiral Spacing or Size Total Size Pitch #4 #10 16

- (1): Shaft length is 22' for cohesive soil only. For cohesionless soil, contact geotechnical branch for design.
- (2): Do not construct high mast drilled shafts on ground slopes steeper than 1.5:1 without the approval of the Division of Traffic.

If rock is encountered during drilling operations and confirmed by the engineer to be of sound quality, the shaft is only required to be further advanced into the rock by the length of rock socket shown in the table. The total length of the shaft need not be longer than that of soil alone. Both longitudinal rebar length and number of ties or spiral length shall be adjusted accordingly.

If a shorter depth is desired for the drilled shaft, the contractor shall provide, for the state's review and approval, a detailed column design with individual site specific soil and rock analysis performed and approved by a Professional Engineer licensed in the Commonwealth of Kentucky.

Spiral reinforcement may be substituted for ties. If spiral reinforcement is used, one and onehalf closed coils shall be provided at the ends of each spiral unit. Subsurface conditions consisting of very soft clay or very loose saturated sand could result in soil parameters weaker than those assumed. Engineer shall consult with the geotechnical branch if such conditions are encountered.

The bottom of the drilled hole shall be firm and thoroughly cleaned so no loose or compressible materials are present at the time of the concrete placement. If the drilled hole contains standing water, the concrete shall be placed using a tremie to displace water. Continuous concrete flow will be required to insure full displacement of any water.

The reinforcement and anchor bolts shall be adequately supported in the proper positions so no movement occurs during concrete placement. Welding of anchor bolts to the reinforcing cage is unacceptable, templates shall be used. Exposed portions of the foundation shall be formed to create a smooth finished surface. All forming shall be removed upon completion of foundation construction.

**Subsection:** 716.03.03 Trenching.

Part:

A) Trenching of Conduit for Highmast Ducted Cables.

**Revision:** 

Add the following after the first sentence: If depths greater than 24 inches are necessary, obtain the Engineer's approval and maintain the required conduit depths coming into the junction boxes. No payment for additional junction boxes for greater depths will be allowed.

<b>Subsection:</b>	716.03.03 Trenching.
Part:	B) Trenching of Conduit for Non-Highmast Cables.
<b>Revision:</b>	Add the following after the second sentence: If depths greater than 24 inches are necessary for
	either situation listed previously, obtain the Engineer's approval and maintain the required
	conduit depths coming into the junction boxes. No payment for additional junction boxes for
	greater depths will be allowed.
<b>Subsection:</b>	716.03.10 Junction Boxes.
<b>Revision:</b>	Replace subsection title with the following: Electrical Junction Box.
<b>Subsection:</b>	716.04.07 Pole with Secondary Control Equipment.
<b>Revision:</b>	Replace the paragraph with the following:
	The Department will measure the quantity as each individual unit furnished and installed. The
	Department will not measure mounting the cabinet to the pole, backfilling, restoration, any
	necessary hardware to anchor pole, or electrical inspection fees, and will consider them
	incidental to this item of work. The Department will also not measure furnishing and installing
	electrical service conductors, specified conduits, meter base, transformer, service panel, fused
	cutout, fuses, lighting arrestors, photoelectrical control, circuit breaker, contactor, manual switch,
	ground rods, and ground wires and will consider them incidental to this item of work.
<b>Subsection:</b>	716.04.08 Lighting Control Equipment.
<b>Revision:</b>	Replace the paragraph with the following:
	The Department will measure the quantity as each individual unit furnished and installed. The
	Department will not measure constructing the concrete base, excavation, backfilling, restoration,
	any necessary anchors, or electrical inspection fees, and will consider them incidental to this item
	of work. The Department will also not measure furnishing and installing electrical service
	conductors, specified conduits, meter base, transformer, service panel, fused cutout, fuses,
	lighting arrestors, photoelectrical control, circuit breakers, contactor, manual switch, ground
	rods, and ground wires and will consider them incidental to this item of work.
<b>Subsection:</b>	716.04.09 Luminaire.
<b>Revision:</b>	Replace the first sentence with the following:
	The Department will measure the quantity as each individual unit furnished and installed.
<b>Subsection:</b>	716.04.10 Fused Connector Kits.
Revision:	Replace the first sentence with the following:
	The Department will measure the quantity as each individual unit furnished and installed.
<b>Subsection:</b>	716.04.13 Junction Box.
Revision:	Replace the subsection title with the following: Electrical Junction Box Type Various.
<b>Subsection:</b>	716.04.13 Junction Box.
Part:	A) Junction Electrical.
Revision:	Rename A) Junction Electrical to the following: A) Electrical Junction Box.
	716.04.14 Trenching and Backfilling.
<b>Revision:</b>	Replace the second sentence with the following:
	The Department will not measure excavation, backfilling, underground utility warning tape (if
	required), the restoration of disturbed areas to original condition, and will consider them
	incidental to this item of work.

	716.04.18 Remo						
Revision:	1 -	agraph with the following:					
	_	The Department will measure the quantity as a lump sum for the removal of lighting equipment.					
	_	will not measure the disposal of all equipment and materials off the project by					
		he contractor. The Department also will not measure the transportation of the materials and will					
		ncidental to this item of work.					
		and Jack Conduit.					
Revision:		agraph with the following: The Department will measure the quantity in linear					
		shall include all work necessary for boring and installing conduit under an					
		y. Construction methods shall be in accordance with Sections 706.03.02,					
	paragraphs 1, 2,						
<b>Subsection:</b>	716.05 PAYME	NT.					
Revision:	-	4810-04811, 20391NS835 and, 20392NS835 under <u>Code</u> , <u>Pay Item</u> , and <u>Pay</u>					
	<u>Unit</u> with the fol	llowing:					
	<u>Code</u>	Pay Item Pay Unit					
	04810	Electrical Junction Box Each					
	04811	Electrical Junction Box Type B Each					
	20391NS835	Electrical Junction Box Type A Each					
	20392NS835	Electrical Junction Box Type C Each					
	723.02.02 Paint.						
Revision:		e with the following: Conform to Section 821.					
	723.03 CONSTI						
Revision:	_ ·	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural					
	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current						
	interims,						
	723.03.02 Poles and Bases Installation.						
Revision:	Replace the first sentence with the following:						
	Regardless of the station and offset noted, locate all poles/bases behind the guardrail a minimum						
	of four feet from the front face of the guardrail to the front face of the pole base.						
Subsection:	723.03.02 Poles and Bases Installation.						
Part:	· ·	A) Steel Strain and Mastarm Poles Installation					
Revision:	Replace the second paragraph with the following: For concrete base installation, see Section						
	716.03.02, B), 2), Paragraphs 2-7. Drilled shaft depth shall be based on the soil conditions						
G. L 41	encountered during drilling and slope condition at the site. Refer to the design chart below:						
	723.03.02 Poles and Bases Installation.						
Part:	B) Pedestal or Pedestal Post Installation.						
Revision:		th sentence of the paragraph with the following: For breakaway supports,					
		ion 12 of the AASHTO Standard Specifications for Structural Supports for					
	Highway Signs,	Luminaires, and Traffic Signals, 2013-6th Edition with current interims.					

Subsection:	723.03.03 Trenching.			
Part:	A) Under Roadway.			
Revision:	Add the following after the second sentence: If depths greater than 24 inches are necessary,			
	obtain the Engineer's approval and maintain ether required conduit depths coming into the			
	junction boxes. No payment for additional junction boxes for greater depths will be allowed.			
G 1 4				
	723.03.11 Wiring Installation.			
Revision:	Add the following sentence between the fifth and sixth sentences: Provide an extra two feet of			
Cubaadian	loop wire and lead-in past the installed conduit in poles, pedestals, and junction boxes.			
	723.03.12 Loop Installation.			
Revision:	Replace the fourth sentence of the 2nd paragraph with the following: Provide an extra two feet of			
Subsection:	loop wire and lead-in past the installed conduit in poles, pedestals, and junction boxes.  723.04.02 Junction Box.			
	Replace subsection title with the following: Electrical Junction Box Type Various.			
	723.04.03 Trenching and Backfilling.			
	Replace the second sentence with the following: The Department will not measure excavation,			
Ke vision.	backfilling, underground utility warning tape (if required), the restoration of disturbed areas to			
	original condition, and will consider them incidental to this item of work.			
Subsection:	723.04.10 Signal Pedestal.			
	Replace the second sentence with the following: The Department will not measure excavation,			
	concrete, reinforcing steel, specified conduits, fittings, ground rod, ground wire, backfilling,			
	restoring disturbed areas, or other necessary hardware and will consider them incidental to this			
	item of work.			
<b>Subsection:</b>	723.04.15 Loop Saw Slot and Fill.			
<b>Revision:</b>	Replace the second sentence with the following: The Department will not measure sawing,			
	cleaning and filling induction loop saw slot, loop sealant, backer rod, and grout and will consider			
	them incidental to this item of work.			
	723.04.16 Pedestrian Detector.			
	Replace the paragraph with the following: The Department will measure the quantity as each			
	individual unit furnished, installed and connected to pole/pedestal. The Department will not			
	measure installing R10-3e (with arrow) sign, furnishing and installing mounting hardware for			
	sign and will consider them incidental to this item of work.			
	723.04.18 Signal Controller- Type 170.			
Revision:	Replace the second sentence with the following: The Department will not measure constructing			
	the concrete base or mounting the cabinet to the pole, connecting the signal and detectors,			
	excavation, backfilling, restoration, any necessary pole mounting hardware, electric service, or			
	electrical inspection fees and will consider them incidental to this item of work. The Department			
	will also not measure furnishing and connecting the induction of loop amplifiers, pedestrian			
	isolators, load switches, model 400 modem card; furnishing and installing electrical service			
	conductors, specified conduits, anchors, meter base, fused cutout, fuses, ground rods, ground			
	wires and will consider them incidental to this item of work.			

Revision: R	23.04.20 Install Signal Controller - Type 170. Replace the paragraph with the following: The Department will measure the quantity as each adjuidual unit installed. The Department will not measure constructing the concrete base or					
in						
	individual unit installed. The Department will not measure constructing the concrete base or					
111	nounting the cabinet to the pole, connecting the signal and detectors, and excavation,					
	packfilling, restoration, any necessary pole mounting hardware, electric service, or electrical					
	respection fees and will consider them incidental to this item of work. The Department will also					
	ot measure connecting the induction loop amplifiers, pedestrian, isolators, load switches, model					
	00 modem card; furnishing and installing electrical service conductors, specified conduits,					
	nchors, meter base, fused cutout, fuses, ground rods, ground wires and will consider them					
	ncidental to this item of work.					
	23.04.22 Remove Signal Equipment.					
	Replace the paragraph with the following: The Department will measure the quantity as a lump					
	um removal of signal equipment. The Department will not measure the return of control					
	quipment and signal heads to the Department of Highways as directed by the District Traffic					
	Engineer. The Department also will not measure the transportation of materials of the disposal					
	of all other equipment and materials off the project by the contractor and will consider them					
	ncidental to this item of work.					
	23.04.28 Install Pedestrian Detector Audible.					
	Replace the second sentence with the following: The Department will not measure installing sign					
	210-3e (with arrow) and will consider it incidental to this item of work. 23.04.29 Audible Pedestrian Detector.					
	Replace the second sentence with the following: The Department will not measure furnishing					
	nd installing the sign R10-3e (with arrow) and will consider it incidental to this item of work. 23.04.30 Bore and Jack Conduit.					
	Replace the paragraph with the following: The Department will measure the quantity in linear					
	eet. This item shall include all work necessary for boring and installing conduit under an					
	xisting roadway. Construction methods shall be in accordance with Sections 706.03.02,					
	paragraphs 1, 2, and 4.					
	23.04.31 Install Pedestrian Detector.					
	Replace the paragraph with the following: The Department will measure the quantity as each					
	ndividual unit installed and connected to pole/pedestal. The Department will not measure					
	nstalling sign R 10-3e (with arrow) and will consider it incidental to this item of work.					
	23.04.32 Install Mast Arm Pole.					
	Replace the second sentence with the following: The Department will not measure arms, signal					
	nounting brackets, anchor bolts, or any other necessary hardware and will consider them					
	ncidental to this item of work.					
	23.04.33 Pedestal Post.					
	Replace the second sentence with the following: The Department will not measure excavation,					
	oncrete, reinforcing steel, anchor bolts, conduit, fittings, ground rod, ground wire, backfilling,					
	estoration, or any other necessary hardware and will consider them incidental to this item of					
W	vork.					

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	723.04.36 Traffic Signal Pole Base.					
Revision:	Replace the second sentence with the following: The Department will not measure excavation,					
	einforcing steel, anchor bolts, specified conduits, ground rods, ground wires, backfilling, or					
	restoration and will consider them incidental to this item of work.					
<b>Subsection:</b>	723.04.37 Install Signal Pedestal.					
Revision:	Replace the second sentence with the following: The Department will not measure excavation,					
	concrete, reinforcing steel, anchor bolts, specified conduits, fittings, ground rod, ground wire,					
	backfilling, restoration, or any other necessary hardware and will consider them incidental to this					
	item of work.					
<b>Subsection:</b>	723.04.38 Install Pedestal Post.					
Revision:	Replace the second sentence with the following: The Department will not measure excavation,					
	concrete, reinforcing steel, anchor bolts, specified conduits, fittings, ground rod, ground wire,					
	backfilling, restoration, or any other necessary hardware and will consider them incidental to this					
	item of work.					
<b>Subsection:</b>	723.05 PAYMENT.					
Revision:	Replace items 04810-04811, 20391NS835 and, 20392NS835 under <u>Code</u> , <u>Pay Item</u> , and <u>Pay</u>					
	<u>Unit</u> with the following:					
	Code Pay Item Pay Unit					
	04810 Electrical Junction Box Each					
	04811 Electrical Junction Box Type B Each					
	20391NS835 Electrical Junction Box Type A Each					
	20392NS835 Electrical Junction Box Type C Each					
<b>Subsection:</b>	804.01.02 Crushed Sand.					
Revision:	Delete last sentence of the section.					
<b>Subsection:</b>	804.01.06 Slag.					
Revision:	Add subsection and following sentence.					
	Provide blast furnace slag sand where permitted. The Department will allow steel slag sand only					
	in asphalt surface applications.					
<b>Subsection:</b>	804.04 Asphalt Mixtures.					
Revision:	Replace the subsection with the following:					
	Provide natural, crushed, conglomerate, or blast furnace slag sand, with the addition of filler as					
	necessary, to meet gradation requirements. The Department will allow any combination of					
	natural, crushed, conglomerate or blast furnace slag sand when the combination is achieved using					
	cold feeds at the plant. The Engineer may allow other fine aggregates.					
Subsection:	806.03.01 General Requirements.					
	Replace the second sentence of the paragraph with the following:					
	Additionally, the material must have a minimum solubility of 99.0 percent when tested according					
	to AASHTO T 44 and PG 76-22 must exhibit a minimum recovery of 60 percent, with a $J_{NR}$					
	(nonrecoverable creep compliance) between 0.1 and 0.5, when tested according to AASHTO TI					
	70.					

Subsection:	806.03.01 General Requirements.						
	PG Binder Requirements and Price Adjustment Schedule						
	Replace the Elastic Recovery, % (3) (AASHTO T301) and all corresponding values in the table						
	with the following:						
	Test Specification 100% Pay 90% Pay 80% Pay 70% Pay 50% Pay 100% P						
	MSCR recovery, $\%^{(3)}$ 60 Min. ≥58 56 55 54 <53						
	(AASHTO TP 70)						
	806.03.01 General Requirements.						
	PG Binder Requirements and Price Adjustment Schedule						
<b>Superscript:</b>	(3)						
Revision:	Replace (3) with the following:						
	Perform testing at 64°C.						
<b>Subsection:</b>	813.04 Gray Iron Castings.						
<b>Revision:</b>	Replace the reference to "AASHTO M105" with "ASTM A48".						
<b>Subsection:</b>	813.09.02 High Strength Steel Bolts, Nuts, and Washers.						
Number:	A) Bolts.						
<b>Revision:</b>	Delete first paragraph and "Hardness Number" Table. Replace with the following:						
	A) Bolts. Conform to ASTM A325 (AASHTO M164) or ASTM A490 (AASHTO 253) as						
	applicable.						
<b>Subsection:</b>	814.04.02 Timber Guardrail Posts.						
Revision:	Third paragraph, replace the reference to "AWPA C14" with "AWPA U1, Section B, Paragraph						
	4.1".						
	814.04.02 Timber Guardrail Posts.						
Revision:	Replace the first sentence of the fourth paragraph with the following:						
	Use any of the species of wood for round or square posts covered under AWPA U1.						
	814.04.02 Timber Guardrail Posts.						
Revision:	Fourth paragraph, replace the reference to "AWPA C2" with "AWPA U1, Section B, Paragraph						
	4.1".						
	814.04.02 Timber Guardrail Posts.						
	Delete the second sentence of the fourth paragraph.						
	814.05.02 Composite Plastic.						
Revision:	1) Add the following to the beginning of the first paragraph: Select composite offset blocks						
	conforming to this section and assure blocks are from a manufacturer included on the						
	Department's List of Approved Materials.						
C14:	2) Delete the last paragraph of the subsection.						
	816.07.02 Wood Posts and Braces.						
Revision:	First paragraph, replace the reference to "AWPA C5" with "AWPA U1, Section B, Paragraph 4.1".						
Subsection:	816.07.02 Wood Posts and Braces.						
	Delete the second sentence of the first paragraph.						
	818.07 Preservative Treatment.						
	First paragraph, replace all references to "AWPA C14" with "AWPA U1, Section A".						
IVEA121011:	1 11 St paragraph, replace an references to AWFA C14 with AWFA C1, Section A.						

Subsection	834.14.03 High Mast Poles.
Revision:	Remove the second and fourth sentence from the first paragraph.
Subsection	834.14.03 High Mast Poles.
Revision:	Replace the third paragraph with the following: Provide calculations and drawings that are
Kevision.	stamped by a Professional Engineer licensed in the Commonwealth of Kentucky.
Subsection:	834.14.03 High Mast Poles.
Revision:	Replace paragraph six with the following: Provide a pole section that conforms to ASTM A 595 grade A with a minimum yield strength of 55 KSI or ASTM A 572 with a minimum yield strength of 55 KSI. Use tubes that are round or 16 sided with a four inch corner radius, have a constant linear taper of .144 in/ft and contain only one longitudinal seam weld. Circumferential welded tube butt splices and laminated tubes are not permitted. Provide pole sections that are telescopically slip fit assembled in the field to facilitate inspection of interior surface welds and the protective coating. The minimum length of the telescopic slip splices shall be 1.5 times the inside diameter of the exposed end of the female section. Use longitudinal seam welds as commended in Section 5.15 of the AASHTO 2013 Specifications. The thickness of the transverse base shall not be less than 2 inches. Plates shall be integrally welded to the tubes with a telescopic welded joint or a full penetration groove weld with backup bar.  The handhole cover shall be removable from the handhole frame. One the frame side opposite the hinge, provide a mechanism on the handhole cover/frame to place the Department's standard padlock as specified in Section 834.25. The handhole frame shall have two stainless studs installed opposite the hinge to secure the handhole cover to the frame which includes providing stainless steel wing nuts and washers. The handhole cover shall be manufactured from 0.25 inch thick galvanized steel (ASTM A 153) and have a neoprene rubber gasket that is permanently secured to the handhole frame to insure weather-tight protection. The hinge shall be manufactured from 7-guage stainless steel to provide adjustability to insure weather-tight fit for the cover. The minimum clear distance between the transverse plate and the bottom opening of the handhole shall not be less than the diameter of the bottom tube of the pole but needs to be at least 15 inches. Provide products that are hot-dip galvanized to the requirements of either ASTM A 12
Subsection: Revision:	834.16 ANCHOR BOLTS. Insert the following sentence at the beginning of the paragraph: The anchor bolt design shall follow the NCHRP Report 494 Section 2.4 and NCHRP 469 Appendix A Specifications.

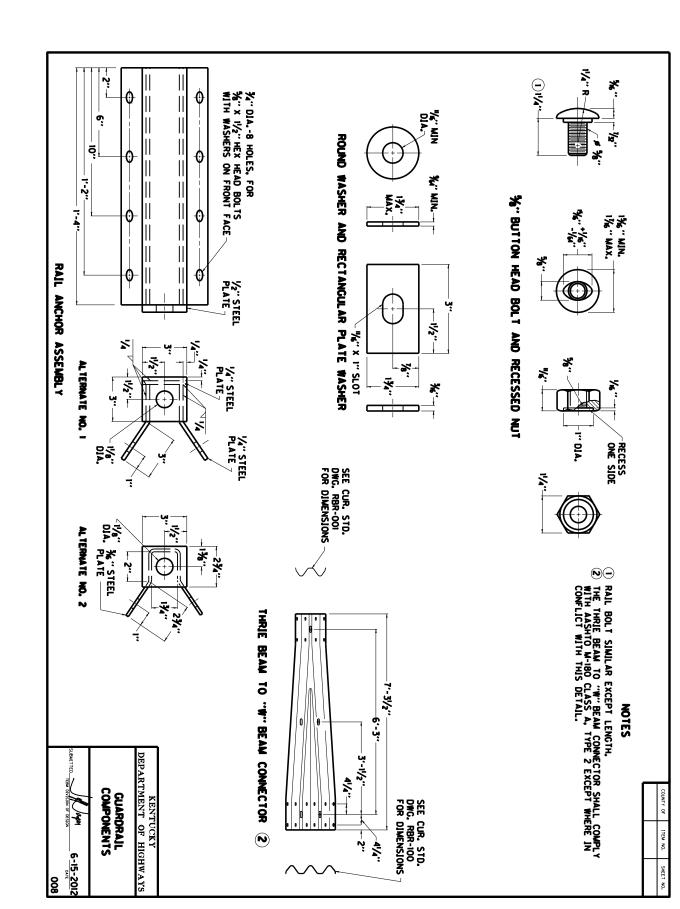
<b>Subsection:</b>	834.17.01 Conventional.
Revision:	Add the following sentence after the second sentence: Provide a waterproof sticker mounted on
	the bottom of the housing that is legible from the ground and indicates the wattage of the fixture
	by providing the first two numbers of the wattage.
<b>Subsection:</b>	834.21.01 Waterproof Enclosures.
Revision:	Replace the last five sentences in the second paragraph with the following sentences:
	Provide a cabinet door with a louvered air vent, filter-retaining brackets and an easy to clean metal filter. Provide a cabinet door that is keyed with a factory installed standard no. 2 corbin traffic control key. Provide a light fixture with switch and bulb. Use a 120-volt fixture and utilize a L.E.D. bulb (equivalent to 60 watts minimum). Fixture shall be situated at or near the top of the cabinet and illuminate the contents of the cabinet. Provide a 120 VAC GFI duplex
	receptacle in the enclosure with a separate 20 amp breaker.
<b>Subsection:</b>	835.07 Traffic Poles.
Revision:	Replace the first sentence of the first paragraph with the following: Pole diameter and wall thickness shall be calculated in accordance with the AASHTO Standard Specifications for
	Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with
	current interims.
Subsection:	835.07 Traffic Poles.
Revision:	*Replace the first sentence of the fourth paragraph with the following: Ensure transverse plates
TTO VISIOII.	have a thickness $\geq 2$ inches.
	*Add the following sentence to the end of the fourth paragraph: The bottom pole diameter shall
	not be less than 16.25 inches.
Subsection:	835.07 Traffic Poles.
Revision:	Replace the third sentence of the fifth paragraph with the following: For anchor bolt design, pole
	forces shall be positioned in such a manner to maximize the force on any individual anchor bolt
	regardless of the actual anchor bolt orientation with the pole.
<b>Subsection:</b>	835.07 Traffic Poles.
Revision:	Replace the first and second sentence of the sixth paragraph with the following:
	The pole handhole shall be 25 inches by 6.5 inches. The handhole cover shall be removable
	from the handhole frame. On the frame side opposite the hinge, provide a mechanism on the
	handhole cover/frame to place the Department's standard padlock as specified in Section 834.25.
	The handhole frame shall have two stainless studs installed opposite the hinge to secure the
	handhole cover to the frame which includes providing stainless steel wing nuts and washers. The
	handhole cover shall be manufactured from 0.25 inch thick galvanized steel (ASTM 153) and
	have a neoprene rubber gasket that is permanently secured to the handhole frame to insure
	weather-tight protection. The hinge shall be manufactured from 7 gauge stainless steel to
	provide adjustability to insure a weather-tight fit for the cover. The minimum clear distance
	between the transverse plate and the bottom opening of the handhole shall not be less than the
	diameter of the bottom tube but needs to be at least 12 inches.
	provide adjustability to insure a weather-tight fit for the cover. The minimum clear distance between the transverse plate and the bottom opening of the handhole shall not be less than the

	835.07 Traffic Poles.				
Revision:	*Replace the first sentence of the last paragraph with the following: Provide calculations and				
	drawings that are stamped by a Professional Engineer licensed in the Commonwealth of				
	Kentucky.				
	*Replace the third sentence of the last paragraph with the following: All tables referenced in				
	835.07 are found in the AASHTO Standard Specifications for Structural Supports for Highw	vay			
	Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.				
<b>Subsection:</b>	835.07.01 Steel Strain Poles.				
Revision:	Replace the second sentence of the second paragraph with the following:				
	The detailed analysis shall be certified by a Professional Engineer licensed in the Commonw	vealth			
	of Kentucky.				
<b>Subsection:</b>	835.07.01 Steel Strain Poles.				
Revision:	Replace number 7. after the second paragraph with the following: 7. Fatigue calculations sh				
	be shown for all fatigue related connections. Provide the corresponding detail, stress categor	ry			
	and example from table 11.9.3.1-1.				
<b>Subsection:</b>	835.07.02 Mast Arm Poles.				
Revision:	Replace the second sentence of the fourth paragraph with the following: The detailed analyst	sis			
	shall be certified by a Professional Engineer licensed in the Commonwealth of Kentucky.				
<b>Subsection:</b>	835.07.02 Mast Arm Poles.				
Revision:	Replace number 7) after the fourth paragraph with the following: 7) Fatigue calculations should				
	be shown for all fatigue related connections. Provide the corresponding detail, stress categor	ry			
	and example from table 11.9.3.1-1.				
<b>Subsection:</b>	835.07.03 Anchor Bolts.				
Revision:	Add the following to the end of the paragraph: There shall be two steel templates (one can be				
	used for the headed part of the anchor bolt when designed in this manner) provided per pole.				
	Templates shall be contained within a 26.5 inch diameter. All templates shall be fully galva	nized			
	(ASTM A 153).				
	835.16.05 Optical Units.				
Revision:	Replace the 3rd paragraph with the following:				
G 1 4	The list of certified products can be found on the following website: http://www.intertek.co.	m.			
	835.19.01 Pedestrian Detector Body.				
Revision:	Replace the first sentence with the following: Provide a four holed pole mounted aluminum				
Cl4:	rectangular housing that is compatible with the pedestrian detector.				
	843.01.01 Geotextile Fabric.				
Table:	TYPE I FABRIC GEOTEXTILES FOR SLOPE PROTECTION AND CHANNEL LINING				
Revision:	Add the following to the chart:				
	Property Minimum Value <sup>(1)</sup> Test Method	_			
	CBR Puncture (lbs) 494 ASTM D6241				
	Permittivity (1/s) 0.7 ASTM D4491				

<b>Subsection:</b>	843.01.01 Geotextile Fabric.			
Table:	TYPE II FABRIC GEOTEXTILES FOR UNDERDRAINS			
<b>Revision:</b>	Add the following to the chart:			
	<u>Property</u>	Minimum Value <sup>(1)</sup>	Test Method	
	CBR Puncture (lbs)	210	ASTM D6241	
	Permittivity (1/s)	0.5	ASTM D4491	
<b>Subsection:</b>	843.01.01 Geotextile Fabric.			
_ *****	TYPE III FABRIC GEOTEXTILES FOR SUBGRADE OR EMBANKMENT STABILIZATION			
Revision:	Add the following to the chart:			
	Property	Minimum Value <sup>(1)</sup>	Test Method	
	CBR Puncture (lbs)	370	ASTM D6241	
	Permittivity (1/s)	0.05	ASTM D4491	
<b>Subsection:</b>	843.01.01 Geotextile Fabric.			
	TYPE IV FABRIC GEOTEXTILES FOR EMBANKMENT DRAINAGE BLANKETS AND			
	PAVEMENT EDGE DRAIN			
Revision:	Add the following to the chart:			
		Minimum Value <sup>(1)</sup>	Test Method	
	CBR Puncture (lbs)	309	ASTM D6241	
	Permittivity (1/s)	0.5	ASTM D4491	
<b>Subsection:</b>	843.01.01 Geotextile Fabric.			
Table:	TYPE V HIGH STRENGTH GEOTEXTILE FABRIC			
<b>Revision:</b>	Make the following changes to the chart:			
	<u>Property</u>	Minimum Value <sup>(1)</sup>	Test Method	
	CBR Puncture (lbs)	618	ASTM D6241	
	Grab Strength (lbs)	700	ASTM D4632	
	Apparent Opening Size	U.S. #40 <sup>(3)</sup>	ASTM D4751	
	(3) Maximum average roll va	lue.		

### STANDARD DRAWINGS THAT APPLY

TYPICAL GUARDRAIL INSTALLATIONS	RBI-001-09
TYPICAL GUARDRAIL INSTALLATIONS	RBI-002-06
GUARDRAIL END TREATMENT TYPE 7	RBR-050-06
GUARDRAIL POSTS	
CHANNEL LINING CLASS II AND III	RDD-040-04
CULVERT & STORM SEWER PIPE TYPES & COVER HEIGHTS	RDI-003-03
PIPE BEDDING FOR CULVERTS, ENTRANCE AND STORM SEWER PIPE	RDI-020-08
PIPE BEDDING, TRENCH CONDITION	RDI-025-04
COATINGS, LININGS AND PAVINGS FOR NON-STRUCTURAL PLATE PIPE	
SILT TRAP - TYPE A	RDX-220-04
SILT TRAP - TYPE C	RDX-230
CURVE WIDENING AND SUPERELEVATION TRANSITIONS	
MISCELLANEOUS STANDARDS PART 1	
GABION RETAINING WALLS	RGX-050-01
ONE POINT PROCTER FAMILY OF CURVES	RGX-200
APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT	RPM-110-05
NETTING	RRE-002-04
SHOULDER CLOSURE	TTC-135-01
POST SPLICING DETAIL	TTD-110-01
PAVEMENT CONDITION WARNING SIGNS	TTD-125



THE CONTRACT UNIT PRICE BID SHALL BE:
GUARDRAIL-STEEL W BEAM-SINGLE FACE -

COUNTY OF

ITEM NO.

SHEET NO.

LIN. FT.

DIMENSIONAL TOLERANCES NOT SHOWN OR IMPLIED ARE INTENDED TO BE THOSE CONSISTENT WITH THE PROPER FUNCTIONING OF THE PART, INCLUDING ITS APPEARANCE AND ACCEPTED MANUFACTURING PRACTICES. GUARDRAIL-STEEL W BEAM-DOUBLE FACE - LIN. FT.

THE RAIL ELEMENT SHALL COMPLY WITH AASHTO M-180-CLASS A. TYPE II.

- ② 8 5%"× 11/4" LONG BUTTON HEAD BOLTS AND HEX HEAD RECESS NUTS REQUIRED FOR EACH RAIL SPLICE.
- LENGTH EQUALS POST AND BLOCK WIDTH PLUS: 2" FOR BOLT OR  $2^1/4$ " FOR THREADED ROD.
- GALVANIZED STEEL IOG COMMON COATED NAIL (DRIVE NAIL AT THE TOP OR BOTTOM CENTER OF BLOCK AND POST AFTER BOLT IS INSTALLED).
- $\%^{\prime\prime}\times$  ③ STEEL THREADED ROD AND TWO (2) HEX HEAD NUTS OR  $\%^{\prime\prime}\times$  ③ BUTTON OR HEX HEAD BOLT AND HEX HEAD NUT.
- $56^{\prime\prime\prime}$ ×8" BUTTON HEAD BOLT, HEX HEAD RECESS NUT AND ONE  $56^{\prime\prime\prime}$  ROUND WASHER (TYP.). BOLT SHALL HAVE A MINIMUM THREAD LENGTH OF 2". REQUIRED FOR DOUBLE RAIL
- BOTH 12'-6' AND 25' LENGTHS OF "W" BEAM GUARDRAIL SECTIONS WILL BE PERMITTED UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEEL BEAN

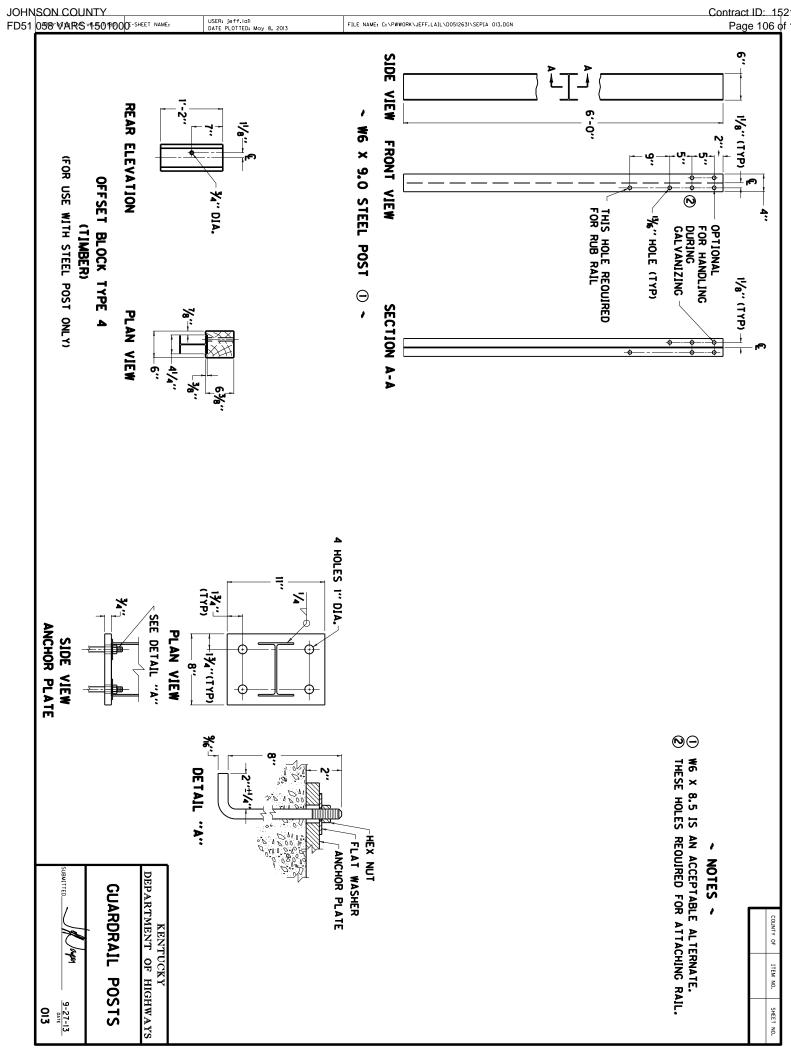
KENTUCKY

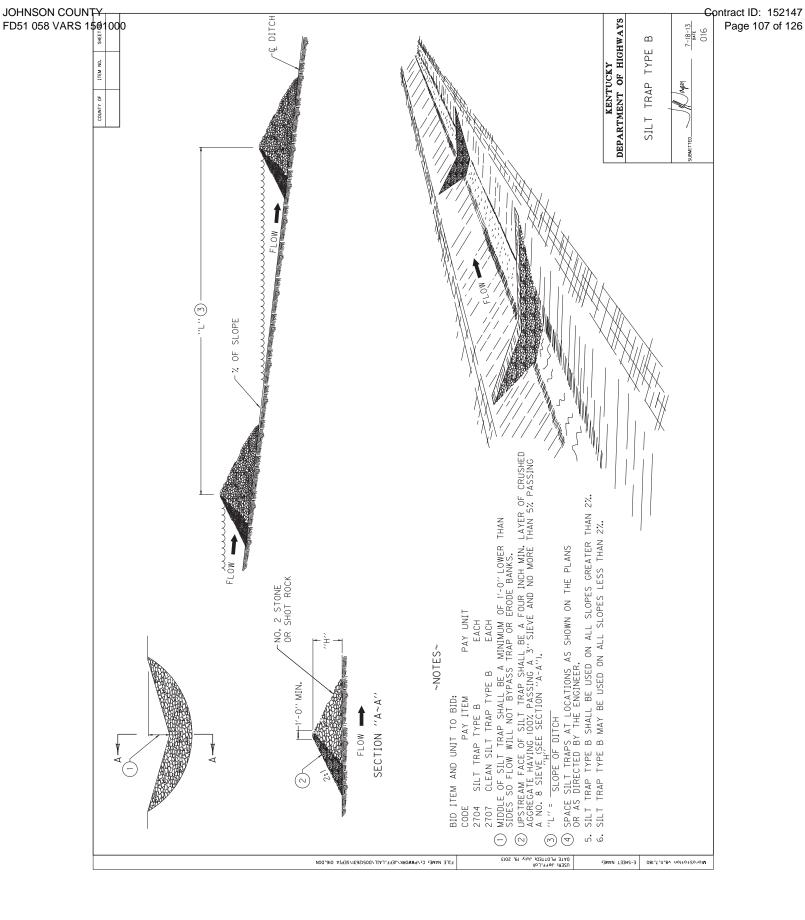
**GUARDRAIL** "W" BEAM

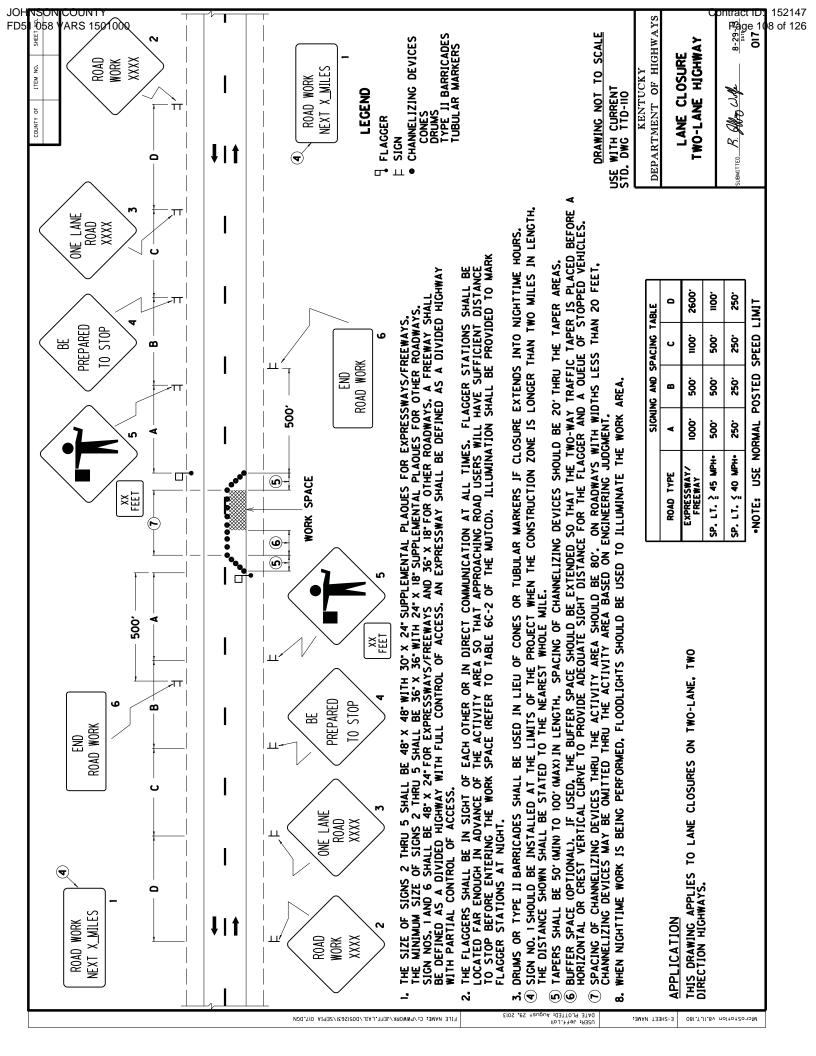
DIVISION OF DESIGN

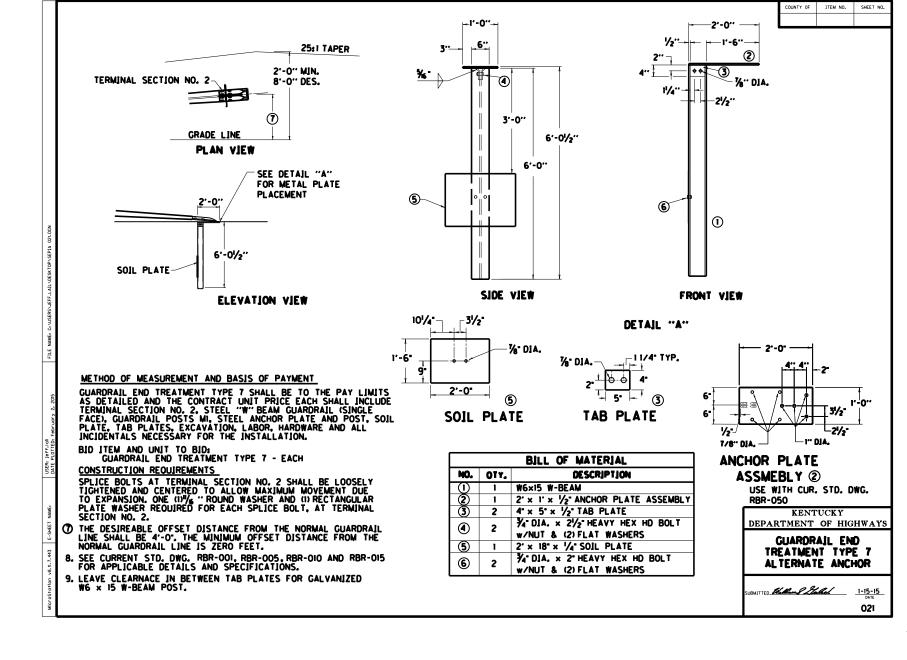
12-11-12 DATE

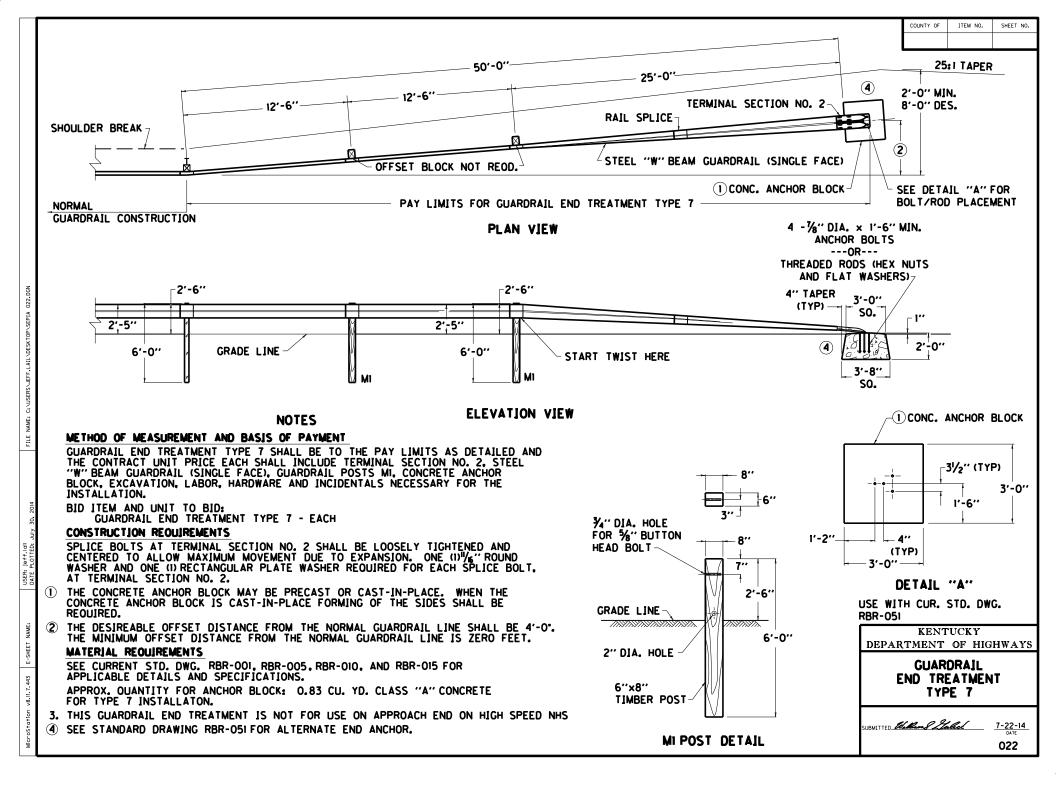
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## **PART III**

# EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

JOHNSON COUNTY FD51 058 VARS 1501000

#### Contract ID: 152147 Page 112 of 126

# TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

# LABOR AND WAGE REQUIREMENTS APPLICABLE TO OTHER THAN FEDERAL-AID SYSTEM PROJECTS

I. Application

II. Nondiscrimination of Employees (KRS 344)

III. Payment of Predetermined Minimum Wages

IV. Statements and Payrolls

#### I. APPLICATION

- 1. These contract provisions shall apply to all work performed on the contract by the contractor with his own organization and with the assistance of workmen under his immediate superintendence and to all work performed on the contract by piecework, station work or by subcontract. The contractor's organization shall be construed to include only workmen employed and paid directly by the contractor and equipment owned or rented by him, with or without operators.
- 2. The contractor shall insert in each of his subcontracts all of the stipulations contained in these Required Provisions and such other stipulations as may be required.
- 3. A breach of any of the stipulations contained in these Required Provisions may be grounds for termination of the contract.

#### II. NONDISCRIMINATION OF EMPLOYEES

AN ACT OF THE KENTUCKY GENERAL ASSEMBLY TO PREVENT DISCRIMINATION IN EMPLOYMENT KRS CHAPTER 344 EFFECTIVE JUNE 16, 1972

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

- 1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy). The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, disability or age (between forty and seventy), except that such notice or advertisement may indicate a preference, limitation, or specification based on religion, or national origin when religion, or national origin is a bona fide occupational qualification for employment.
- 3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual

because of his race, color, religion, national origin, sex, disability or age (between forty and seventy), in admission to, or employment in any program established to provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

# III. PAYMENT OF PREDETERMINED MINIMUM WAGES

- 1. These special provisions are supplemented elsewhere in the contract by special provisions which set forth certain predetermined minimum wage rates. The contractor shall pay not less than those rates.
- 2. The minimum wage determination schedule shall be posted by the contractor, in a manner prescribed by the Department of Highways, at the site of the work in prominent places where it can be easily seen by the workers.

#### IV. STATEMENTS AND PAYROLLS

- 1. All contractors and subcontractors affected by the terms of KRS 337.505 to 337.550 shall keep full and accurate payroll records covering all disbursements of wages to their employees to whom they are required to pay not less than the prevailing rate of wages. Payrolls and basic records relating thereto will be maintained during the course of the work and preserved for a period of one (1) year from the date of completion of this contract.
- 2. The payroll records shall contain the name, address and social security number of each employee, his correct classification, rate of pay, daily and weekly number of hours worked, itemized deductions made and actual wages paid.
- 3. The contractor shall make his daily records available at the project site for inspection by the State Department of Highways contracting office or his authorized representative.

Periodic investigations shall be conducted as required to assure compliance with the labor provisions of the contract. Interrogation of employees and officials of the contractor shall be permitted during working hours.

Aggrieved workers, Highway Managers, Assistant District Engineers, Resident Engineers and Project Engineers shall report all complaints and violations to the Division of Contract Procurement.

The contractor shall be notified in writing of apparent violations. The contractor may correct the reported violations and notify the Department of Highways of the action taken or may request an informal hearing. The request for hearing shall be in writing within ten (10) days after receipt of the notice of the reported violation. The contractor may submit

records and information which will aid in determining the true facts relating to the reported violations.

Any person or organization aggrieved by the action taken or the findings established as a result of an informal hearing by the Division of Contract Procurement may request a formal hearing.

- 4. The wages of labor shall be paid in legal tender of the United States, except that this condition will be considered satisfied if payment is made by a negotiable check, on a solvent bank, which may be cashed readily by the employee in the local community for the full amount, without discount or collection charges of any kind. Where checks are used for payments, the contractor shall make all necessary arrangements for them to be cashed and shall give information regarding such arrangements.
- 5. No fee of any kind shall be asked or accepted by the contractor or any of his agents from any person as a condition of employment on the project.
- 6. No laborers shall be charged for any tools used in performing their respective duties except for reasonably avoidable loss or damage thereto.
- 7. Every employee on the work covered by this contract shall be permitted to lodge, board, and trade where and with whom he elects and neither the contractor nor his agents, nor his employees shall directly or indirectly require as a condition of employment that an employee shall lodge, board or trade at a particular place or with a particular person.
- 8. Every employee on the project covered by this contract shall be an employee of either the prime contractor or an approved subcontractor.
- 9. No charge shall be made for any transportation furnished by the contractor or his agents to any person employed on the work.
- 10. No individual shall be employed as a laborer or mechanic on this contract except on a wage basis, but this shall not be construed to prohibit the rental of teams, trucks or other equipment from individuals.

No Covered employee may be employed on the work except in accordance with the classification set forth in the schedule mentioned above; provided, however, that in the event additional classifications are required, application shall be made by the contractor to the Department of Highways and (1) the Department shall request appropriate classifications and rates from the proper agency, or (2) if there is urgent need for additional classification to avoid undue delay in the work, the contractor may employ such workmen at rates deemed comparable to rates established for similar classifications provided he has made written application through the Department of Highways, addressed to the proper agency, for the supplemental rates. The contractor shall retroactively adjust, upon receipt of the supplemental rates schedule, the wages of any employee paid less than the established rate and may adjust the wages of any employee overpaid.

- 11. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any work-week in which he is employed on such work, to work in excess of eight hours in any calendar day or in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one half times his basic rate of pay for all hours worked in excess of eight hours in any calendar day or in excess of forty hours in such work-week. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. This agreement shall be in writing and shall be executed prior to the employee working in excess of eight (8) hours, but not more than ten (10) hours, in any one (1) calendar day.
- 12. Payments to the contractor may be suspended or withheld due to failure of the contractor to pay any laborer or

mechanic employed or working on the site of the work, all or part of the wages required under the terms of the contract. The Department may suspend or withhold payments only after the contractor has been given written notice of the alleged violation and the contractor has failed to comply with the wage determination of the Department of Highways.

13. Contractors and subcontractors shall comply with the sections of Kentucky Revised Statutes, Chapter 337 relating to contracts for Public Works.

Revised 2-16-95

#### Contract ID: 152147 Page 114 of 126

#### **EXECUTIVE BRANCH CODE OF ETHICS**

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

#### KRS 11A.040 (6) provides:

No present or former public servant shall, within six (6) months of following termination of his office or employment, accept employment, compensation or other economic benefit from any person or business that contracts or does business with the state in matters in which he was directly involved during his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved in state government. This subsection shall not prohibit the performance of ministerial functions, including, but not limited to, filing tax returns, filing applications for permits or licenses, or filing incorporation papers.

#### KRS 11A.040 (8) states:

A former public servant shall not represent a person in a matter before a state agency in which the former public servant was directly involved, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, Room 136, Capitol Building, 700 Capitol Avenue, Frankfort, Kentucky 40601; telephone (502) 564-7954.

#### **Kentucky Equal Employment Opportunity Act of 1978**

The requirements of the Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) shall apply to this Contract. The apparent low Bidder will be required to submit EEO forms to the Division of Construction Procurement, which will then forward to the Finance and Administration Cabinet for review and approval. No award will become effective until all forms are submitted and EEO/CC has certified compliance. The required EEO forms are as follows:

- EEO-1: Employer Information Report
- Affidavit of Intent to Comply
- Employee Data Sheet
- Subcontractor Report

These forms are available on the Finance and Administration's web page under *Vendor Information*, *Standard Attachments and General Terms* at the following address: <a href="https://www.eProcurement.ky.gov">https://www.eProcurement.ky.gov</a>.

Bidders currently certified as being in compliance by the Finance and Administration Cabinet may submit a copy of their approval letter in lieu of the referenced EEO forms.

For questions or assistance please contact the Finance and Administration Cabinet by email at **finance.contractcompliance@ky.gov** or by phone at 502-564-2874.

JOHNSON COUNTY FD51 058 VARS 1501000 Contract ID: 152147 Page 116 of 126

# KENTUCKY LABOR CABINET PREVAILING WAGE DETERMINATION CURRENT REVISION HIGHWAY CONSTRUCTION LOCALITY NO. II

Determination No. CR-14-II-HWY

Date of Determination: July 14, 2014

Project No. Highway

This schedule of the prevailing rate of wages for Locality No. II including the counties of ADAIR, BARREN, BELL, BREATHITT, CASEY, CLAY, CLINTON, CUMBERLAND, ESTILL, FLOYD, GARRARD, GREEN, HARLAN, HART, JACKSON, JOHNSON, KNOTT, KNOX, LAUREL, LAWRENCE, LEE, LESLIE, LETCHER, LINCOLN, MCCREARY, MAGOFFIN, MARTIN, MENIFEE, METCALFE, MONROE, MORGAN, OWSLEY, PERRY, PIKE, POWELL, PULASKI, ROCKCASTLE, RUSSELL, TAYLOR, WAYNE, WHITLEY, and WOLFE has been determined in accordance with the provisions of KRS 337.505 to 337.550. This determination shall be referred to as Prevailing Wage Determination No. CR-14-II-HWY.

The following schedule of rates is to be used for highway construction projects advertised or awarded by the <u>Kentucky Transportation Cabinet</u>. This includes any contracts for the relocation of any utilities or other incidental construction projects advertised or awarded by public authorities as a result of the highway construction project.

Apprentices or trainees shall be permitted to work in accordance with Administrative Regulations. Copies of these regulations will be furnished upon request to any interested person.

Overtime is to be computed at not less than one and one-half (1 1/2) times the indicated BASE RATE for all hours worked in excess of eight (8) hours per day, or in excess of forty (40) hours per week. However, KRS 337.540 permits an employee and employer to agree, in writing, that the employee will be compensated at a straight time base rate for hours worked in excess of eight (8) hours in any one calendar day, but not more than ten (10) hours worked in any one calendar day, if such written agreement is prior to the over eight (8) hours in a calendar day actually being worked, or where provided for in a collective bargaining agreement. The fringe benefit rate is to be paid for each hour worked at a straight time rate for all hours worked. Fringe benefit amounts are applicable for all hours worked except when otherwise noted. Welders will receive rate for craft in which welding is incidental.

No laborer, workman or mechanic shall be paid at a rate less than that of the General Laborer except those classified as bona fide apprentices registered with the Kentucky State Apprenticeship Supervisor unless otherwise specified in this schedule of wage rates.

Anthony Russell, Commissioner Department of Workplace Standards

CLASSIFICATIONS	RATE AND FRINGE BENEFITS				
BOILERMAKERS:	BASE RATE \$24.65 FRINGE BENEFIT 12.94				
BRICKLAYERS:					
Bricklayers:	BASE RATE \$22.90 FRINGE BENEFITS 8.50				
Stone Mason:	BASE RATE \$21.50 FRINGE BENEFITS 8.50				
CARPENTERS:					
Carpenters:	BASE RATE \$24.90 FRINGE BENEFITS 14.50				
Piledrivers:	BASE RATE \$24.55 FRINGE BENEFITS 14.50				
CEMENT MASONS:	BASE RATE \$21.25 FRINGE BENEFITS 8.50				
ELECTRICIANS:	*BASE RATE \$29.36 FRINGE BENEFITS 10.55				
*When workmen are required to work from bosum chairs, trusses, staradio and T.V. towers, structural steel (open, unprotected, unfloored r hazardous locations where workmen are subject to a direct fall, excep trucks up to 75 feet: Add 25% to workman's base rate for 50 to 75 feet base rate for over 75 feet.	aw steel), and bridges or similar t where using JLG's and bucket				
LINEMAN:	*BASE RATE \$30.09				
	FRINGE BENEFITS 10.94				
	*BASE RATE \$26.90 FRINGE BENEFITS 10.31				
	*BASE RATE \$17.79 FRINGE BENEFITS 8.51				
IRONWORKERS:	BASE RATE \$ 26.97 FRINGE BENEFITS 20.01				

CLASSIFICATIONS

#### **RATE AND FRINGE BENEFITS**

#### LABORERS:

GROUP 1: Aging and curing of concrete (any mode or method), asbestos abatement worker, asphalt plant laborers, asphalt laborers; batch truck dumpers; carpenter tenders, cement mason tenders, cleaning of machines, concrete laborers, demolition laborers, dredging laborers, drill helper, environmental laborer - nuclear, radiation, toxic and hazardous waste – Level D, flagmen, grade checkers, all hand digging and hand back filling, highway marker placers, landscaping laborers, mesh handlers and placers, puddler, railroad laborers, rip-rap and grouters, right of way laborers, sign, guard rail and fence installers (all types), signalmen, sound barrier installer, storm and sanitary sewer laborers, swampers, truck spotters and dumpers, wrecking of concrete forms, general cleanup:

**HEAVY & HIGHWAY** 

BASE RATE

\$21.80

Contract ID: 152147

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FRINGE BENEFITS

12.36

GROUP 2: Batter board men (sanitary and storm sewer), brickmason tenders, mortar mixer operator, scaffold builders, burner and welder, bushammers, chain saw operator, concrete saw operators, deckhand scow man, dry cement handlers, environmental laborers — nuclear, radiation, toxic and hazardous waste — Level C, forklift operators for masonry, form setters, green concrete cutting, hand operated grouter and grinder machine operator, jack hammers, lead paint abatement, pavement breakers, paving joint machine, pipe layers — laser operators (non-metallic), plastic pipe fusion, power driven Georgia buggy and wheel barrow, power post hole diggers, precast manhole setters, walk-behind tampers, walk-behind trenchers, sand blasters, concrete chippers, surface grinders, vibrator operators, wagon drillers:

**HEAVY & HIGHWAY** 

**BASE RATE** 

\$22.05

FRINGE BENEFITS

12.36

GROUP 3: Air track driller (all types), asphalt luteman and rakersm gunnite nozzleman, gunnite operators and mixers, grout pump operator, powderman and blaster, side rail setters, rail paved ditches, screw operators, tunnel laborers (free air), and water blasters:

**HEAVY & HIGHWAY** 

BASE RATE

\$22.10

FRINGE BENEFITS

12.36

GROUP 4: Caisson workers (free air), cement finishers, environmental laborer – nuclear, radiation, toxic and hazardous waste – Level A and B, miners and drillers (free air), tunnel blasters, and tunnel mockers (free air), directional and horizontal boring, air track drillers (all types), powder man and blasters, troxler and concrete tester if laborer is utilized:

**HEAVY & HIGHWAY** 

**BASE RATE** 

\$22.70

**FRINGE BENEFITS** 

12.36

#### **OPERATING ENGINEERS:**

#### Group A-1:

NCCCO or OECP Certified; Crane, dragline, hoist (1 drum when used for stack or chimney construction or repair), hoisting engineer (2 or more drums), orangepeel, overhead crane, piledriver, truck crane, tower crane, hydraulic crane:

BASE RATE

\$29.95

**FRINGE BENEFITS** 

14.15

Page 3 of 5

CR-14-II-HWY July 14, 2014

#### **CLASSIFICATIONS**

#### RATE AND FRINGE BENEFITS

#### **OPERATING ENGINEERS (CONTINUED):**

#### Group A:

Auto patrol, batcher plant, bituminous paver, cable-way, clamshell, concrete mixer (21 cu. ft. or over), concrete pump, crane, crusher plant, derrick, derrick boat, ditching and trenching machine, dragline, dredge engineer, elevator (regardless of ownership when used for hoisting any building material), elevating grader and all types of loaders, hoe-type machine, hoisting engine, locomotive, LeTourneau or carry-all scoop, bulldozer, mechanic, orangepeel bucket, piledriver, power blade, roller (bituminous), roller (earth), roller (rock), scarifier, shovel, tractor shovel, truck crane, well points, winch truck, push dozer, grout pump, high lift, fork lift (regardless of lift height), all types of boom cats, multiple operator, core drill, tow or push boat, A-Frame winch truck, concrete paver, gradeall, hoist, hyster, material pump, pumpcrete, ross carrier, sheepfoot, sideboom, throttle-valve man, rotary drill, power generator, mucking machine, rock spreader attached to equipment, scoopmobile, KeCal loader, tower cranes (French, German and other types), hydrocrane, tugger, backfiller gurries, self-propelled compactor, self-contained hydraulic percussion drill:

BASE RATE \$28.85 FRINGE BENEFITS 14.15

#### Group B:

All air compressors (200 cu. ft. per min. or greater capacity), bituminous mixer, concrete mixer (under 21 cu. ft.), welding machine, form grader, tractor (50 H.P. and over), bull float, finish machine, outboard motor boat, brakeman, mechanic helper, whirly oiler, tractair and road widening trencher, articulating trucks:

BASE RATE \$26.24 FRINGE BENEFITS 14.15

#### Group B2:

Greaser on grease facilities servicing heavy equipment:

BASE RATE \$2

\$26.65

FRINGE BENEFITS 14.15

#### Group C:

Bituminous distributor, cement gun, conveyor, mud jack, paving joint machine, pump, tamping machine, tractors (under 50 H.P.), vibrator, oiler, air compressors (under 200 cu. ft. per min. capacity), concrete saw, burlap and curing machine, hydro seeder, power form handling equipment, deckhand oiler, hydraulic post driver:

	BASE RATE FRINGE BENEFITS	\$25.95 14.15
PAINTERS: All Excluding Bridges:	BASE RATE FRINGE BENEFITS	\$19.92 9.57
Bridges:	BASE RATE FRINGE BENEFITS	\$23.92 10.07

### RATE AND FRINGE BENEFITS

PLUMBERS:	BASE RATE FRINGE BENEFITS	+
SHEET METAL:	BASE RATE FRINGE BENEFITS	,
TRUCK DRIVERS:		
Truck helper and warehouseman:	BASE RATE FRINGE BENEFITS	
Driver, winch truck and A-Frame when used in transporting materials:	BASE RATE FRINGE BENEFITS	\$23.30 14.50
Driver, (semi-trailer or pole trailer), driver (dump truck, tandem axle), driver of distributor:	BASE RATE FRINGE BENEFITS	•
Driver on mixer trucks (all types):	BASE RATE FRINGE BENEFITS	\$23.45 14.50
Truck mechanic:	BASE RATE FRINGE BENEFITS	\$23.50 14.50
Driver (3 tons and under), tire changer and truck mechanic helper:	BASE RATE FRINGE BENEFITS	\$23.53 14.50
Driver on pavement breakers:	BASE RATE FRINGE BENEFITS	\$23.55 14.50
Driver (over 3 tons), driver (truck mounted rotary drill):	BASE RATE FRINGE BENEFITS	\$23.74 14.50
Driver, Euclid and other heavy earth moving equipment and Low Boy:	BASE RATE FRINGE BENEFITS	\$24.31 14.50
Greaser on greasing facilities:	BASE RATE FRINGE BENEFITS	\$24.40 14.50

#### Kentucky Determination No. CR-14-II-HWY dated July 14, 2014

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

No laborer, workman or mechanic shall be paid at a rate less than that of the General Laborer except those classified as bona fide apprentices registered with the Kentucky State Apprenticeship Supervisor unless otherwise specified in this schedule of wage rates.

These rates are listed pursuant to the Kentucky Determination No. CR-14-II-HWY dated July 14, 2014. Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U. S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

The contract or shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

#### TO: EMPLOYERS/EMPLOYEES

#### **PREVAILING WAGE SCHEDULE:**

The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the numbers of hours worked in each classification at the prescribed hourly base rate.

#### **OVERTIME:**

Overtime is to be paid after an employee works eight (8) hours a day or forty (40) hours a week, whichever gives the employee the greater wage. At least time and one-half the base rate is required for all overtime. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. Wage violations or questions should be directed to the designated Engineer or to the undersigned.

Director
Division of Construction Procurement
Frankfort, Kentucky 40622
502-564-3500

## **PART IV**

# **INSURANCE**

#### **INSURANCE**

The Contractor shall procure and maintain the following insurance in addition to the insurance required by law:

- 1) Commercial General Liability-Occurrence form not less than \$2,000,000 General aggregate, \$2,000,000 Products & Completed Aggregate, \$1,000,000 Personal & Advertising, \$1,000,000 each occurrence.
- 2) Automobile Liability- \$1,000,000 per accident
- 3) Employers Liability:
  - a) \$100,000 Each Accident Bodily Injury
  - b) \$500,000 Policy limit Bodily Injury by Disease
  - c) \$100,000 Each Employee Bodily Injury by Disease
- 4) The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
  - a) "policy contains no deductible clauses."
  - b) "policy contains \_\_\_\_\_ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."
- 5) KENTUCKY WORKMEN'S COMPENSATION INSURANCE. The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

The cost of insurance is incidental to all contract items. All subcontractors must meet the same minimum insurance requirements.

# PART V

## **BID ITEMS**

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#### **PROPOSAL BID ITEMS**

Report Date 3/31/15

Section: 0001 - ROADWAY

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	AMOUNT
010	00001	DGA BASE	92.00	_		\$
020	00212	CL2 ASPH BASE 1.00D PG64-22	30.00	_		\$
030	00301	CL2 ASPH SURF 0.38D PG64-22	15.00	TON		\$
040	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	30.00	EACH		\$
050	02014	BARRICADE-TYPE III	26.00	EACH		\$
060	02351	<b>GUARDRAIL-STEEL W BEAM-S FACE</b>	600.00	LF		\$
070	02371	<b>GUARDRAIL END TREATMENT TYPE 7</b>	13.00	EACH		\$
080	02383	REMOVE & RESET GUARDRAIL	350.00	LF		\$
090	02396	REMOVE GUARDRAIL END TREATMENT	1.00	EACH		\$
100	02484	CHANNEL LINING CLASS III	55.00	TON		\$
110	02562	TEMPORARY SIGNS	1,350.00	SQFT		\$
120	02599	FABRIC-GEOTEXTILE TYPE IV	1,575.00	SQYD		\$
0130	02610	RETAINING WALL-GABION	12.00	CUYD		\$
		MAINTAIN & CONTROL TRAFFIC				
0140	02650	KY 580	1.00	LS		\$
0150	02650	MAINTAIN & CONTROL TRAFFIC KY 1409	1.00	LS		\$
0160	02650	MAINTAIN & CONTROL TRAFFIC KY 1559	1.00	LS		\$
0170	02650	MAINTAIN & CONTROL TRAFFIC KY 1596	1.00	LS		\$
)180	02650	MAINTAIN & CONTROL TRAFFIC KY 1750	1.00	LS		\$
190	02650	MAINTAIN & CONTROL TRAFFIC KY 3389	1.00	LS		\$
200	02650	MAINTAIN & CONTROL TRAFFIC KY 3390	1.00	LS		\$
210	02726	STAKING CULVERT KY 1750 @ MILEPOINT 3.648	1.00	LS		\$
220	03234	RAILROAD RAILS-DRILLED	9,155.00	LF		\$
230	03235	EXCAVATION AND BACKFILL	1,055.00	CUYD		\$
240	03236	CRIBBING	6,780.00	SQFT		\$
0250	08003	FOUNDATION PREPARATION CULVERT KY 1750 @ MILEPOINT 3.648	1.00	LS		\$
260	21415ND	EROSION CONTROL KY 580	1.00	LS		\$
270	21415ND	EROSION CONTROL KY 1409	1.00	LS		\$
280	21415ND	EROSION CONTROL KY 1559	1.00	LS		\$
290	21415ND	EROSION CONTROL KY 1596	1.00	LS		\$
300	21415ND	EROSION CONTROL KY 1750	1.00	LS		\$
310	21415ND	EROSION CONTROL KY 3389	1.00	LS		\$
0320	21415ND	EROSION CONTROL KY 3390	1.00	LS		\$
330	40000	SITE PREPARATION KY 580	1.00	LS		\$

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152147 PROPOSAL BID ITEMS

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LINE	<b>BID CODE</b>	ALT DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FΡ	<b>AMOUNT</b>
0340	40000	SITE PREPARATION KY 1409	1.00	LS		\$	
0350	40000	SITE PREPARATION KY 1559	1.00	LS		\$	
0360	40000	SITE PREPARATION KY 1596	1.00	LS		\$	
0370	40000	SITE PREPARATION KY 1750	1.00	LS		\$	
0380	40000	SITE PREPARATION KY 3389	1.00	LS		\$	
390	40000	SITE PREPARATION KY 3390	1.00	LS		\$	
)400	00468	CULVERT PIPE-36 IN AA1 ALUMINUM	30.00	LF		\$	
0410	00468	CULVERT PIPE-36 IN AA2 STEEL	30.00	LF		\$	

Section: 0002 - DEMOBILIZATION

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0420	02569	DEMOBILIZATION	1.00	LS	(	\$	